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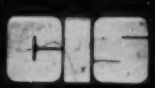

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1990 CENSUS PLANNING—QUESTIONNAIRE SUBJECTS

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON FEDERAL SERVICES, POST OFFICE, AND CIVIL SERVICE

OF THE

COMMITTEE ON GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

AND THE

SUBCOMMITTEE ON CENSUS AND POPULATION

OF THE

COMMITTEE ON POST OFFICE AND CIVIL SERVICE
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

FIRST SESSION

MAY 14, 1987

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1990 CENSUS PLANNING—QUESTIONNAIRE SUBJECTS

THURSDAY, MAY 14, 1987

U.S. SENATE,
SUBCOMMITTEE ON FEDERAL SERVICES,
POST OFFICE, AND CIVIL SERVICE,
COMMITTEE ON GOVERNMENTAL AFFAIRS,
JOINTLY WITH
HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CENSUS AND POPULATION,
COMMITTEE ON POST OFFICE AND CIVIL SERVICE,
Washington, DC.

The Subcommittees met, pursuant to notice, at 9:10 a.m., in room SD-342, Dirksen Senate Office Building, Hon. David Pryor, chairman of the Subcommittee on Federal Services, Post Office, and Civil Service, presiding.

Present: Senator Pryor, Congressman Dymally, and Congresswoman Morella.

OPENING STATEMENT OF SENATOR PRYOR

Senator PRYOR. Ladies and gentlemen, the Subcommittees will come to order. This joint hearing is called this morning to discuss the proposed 1990 census and the questionnaire subjects for that census.

It is a pleasure to be here today with Congressman Dymally and the other members of our Subcommittees.

We are here to examine those subjects which the Federal agencies and other data users have proposed for the 1990 census questionnaire. The list of subjects is required to be submitted to Congress three years in advance of the actual taking of the census.

In addition, we will explore whether the census questionnaire is the most cost effective way to satisfy the perceived need for information or whether there are other options that should be pursued rather than questioning every household.

The content and design of the questionnaire influence response rates, the quality of the data collected, the burden on the respondents, data processing requirements and the cost of taking the census.

The 1980 census cost $1.1 billion. The cost of the 1990 census is now estimated to cost $2.6 billion.

Based on 1985–86 pretests the Bureau of the Census has already lowered its expectations on the response rate from 83 percent to 78 percent. A lower response rate means that more enumerators will be needed to collect census information, driving up census costs further.

The Census Bureau estimates that following up on every 1 percent of unanswered household questionnaire will cost roughly $10 million. I think therefore, it behooves us, to examine thoroughly how to increase the likely response rate.

Another factor that influences cost is the amount of data collected. All of us who are parents have experience with children who might say, "I need a new lightweight tennis racket or an elaborate, eight octave electronic keyboard." We indulge him only to find a few weeks later it was a matter of want and not need. The thing they just had to have is sitting unused in the closet or in an attic.

Last year GAO contacted six Federal agencies to determine how they use the housing data collected on the 1980 short form questionnaires which goes to each and every household. GAO concluded that the need for housing data at the Federal level from 100 percent of the household appears to be somewhat questionable.

Frankly, this morning I had hoped to discuss this proposal with HUD officials. Needless to say, I am disappointed, and I think our Committee, is disappointed that they declined to testify this morning. I understand that they are on their way to the Soviet Union. That is fine and good, but I wish they would just stop by here on their way.

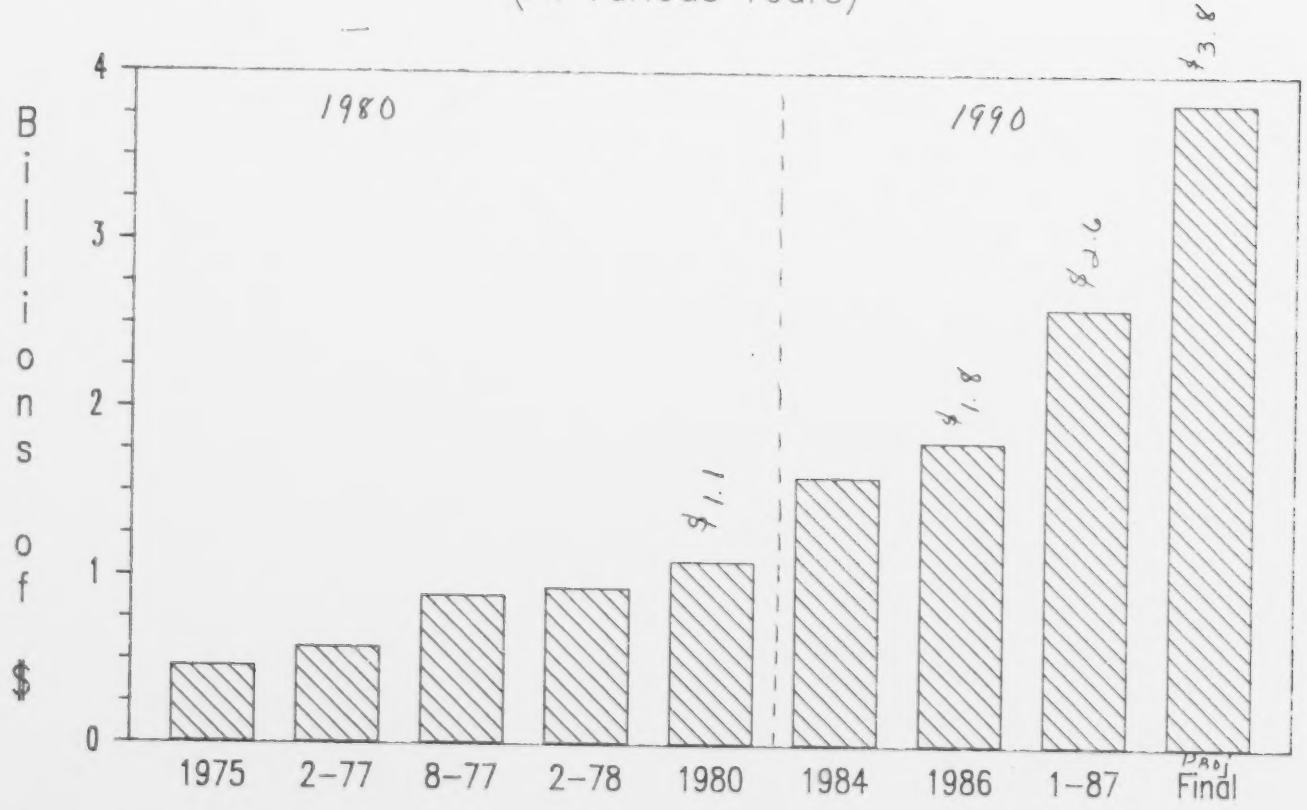
As I mentioned previously, the cost of the decennial census has risen from $1.1 billion in 1980 to a current projected cost of $2.6 billion for the 1990 census. A closer examination of what happened with cost projections for the 1980 census indicates that the 1990 effort could cost the American taxpayers as much as $3.8 billion. I hope this does not occur, and I find this a very alarming prospect.

We will discuss that prospect and other aspects of the 1990 census during this hearing this morning.

[Information submitted by Senator Pryor follows:]

Cost Estimates for the Census

(At Various Years)



SUBJECTS PLANNED FOR THE 1990 CENSUS OF POPULATION AND HOUSING

100-Percent Component

Population

Name
Household relationship
Sex
Race
Age
Marital status
Hispanic origin

Housing

Number of units in structure
Number of rooms in unit
Tenure—owned or rented; condominium
Value of home or monthly rent
Vacancy characteristics
Plumbing
Telephone
Congregate housing

Sample Component

Population

Social characteristics:
- Education—enrollment and attainment
- Place of birth, citizenship, and year of entry
- Ancestry
- Language spoken at home
- Migration
- Disability
- Fertility
- Veteran status

Economic characteristics:
- Employment and unemployment
- Occupation, industry, and class of worker
- Place of work and commuting to work
- Work experience and income in 1989

Housing

Heating equipment and fuels
Source of water and method of sewage disposal
Autos, light trucks, and vans
Kitchen facilities
Year structure built
Year moved into residence
Number of bedrooms
Farm residence
Housing quality
Shelter costs, including utilities

NOTE: Subjects covered in the 100-percent component will apply to all persons and housing units. Those covered by the sample component will apply to a portion of the population and housing units.

Senator PRYOR. Congressman Dymally, we are very proud to have you here today. I must apologize for the Congress and to our witnesses. About 10:15 or 10:10 I will have to race over to the Agriculture Committee, do a short amendment and come right back, but we will leave the Committee in good hands during that period.

OPENING STATEMENT OF CONGRESSMAN DYMALLY

Mr. DYMALLY. It will be a pleasure to play Senator for even 10 minutes. [Laughter.]

That is as close as I am going to get, coming from California as I do.

Mr. Chairman, thank you very much.

On behalf of the House Subcommittee on Census and Population, I am pleased to join you, Chairman Pryor, and your colleagues in the Senate for our second joint hearing of the 100th Congress.

This series of joint hearings signals an unusual interest in and concern about the 1990 decennial census.

I hope Dr. Keane and the Census Bureau will view these hearings as a willingness on our part to be fully involved in the 1990 census, not only when the census count is actually done, but during the critical planning stages when our input might be helpful instead of intrusive.

As Chairman Pryor has noted, today's hearing was prompted by the Census Bureau's submission to Congress on the subject matters to be covered in the 1990 census questionnaires.

The determination of what will be asked of the American public during the census involves a rather delicate balancing act on the part of the Census Bureau, and I am sympathetic, of course, to the pressure on the Bureau as it develops the census forms.

On the one hand, the Constitution mandates that every 10 years a counting of the population be done for purposes of reapportionment. This is a rather simple mandate.

On the other hand, the decennial census has become over the decades the vehicle for collecting a vast amount of data on the characteristics of the population and the manner in which we live. Once we start to collect certain information it is difficult to stop because so many public and private entities have come to rely on this data. Thus, a balancing act has evolved between the need we have developed for certain information and the need to reduce the burden of responding to the census questionnaire on the American public.

It would not hurt to point out that recently in West Germany people actually took to the streets in protest over an upcoming national census. Apparently the census has become too burdensome on citizens; they no longer want to participate.

The primary goal of the decennial census must be to obtain as accurate a count of the number of people residing in the United States as possible. We need to improve coverage of groups which have historically been undercounted such as minorities, the poor, the homeless and rural residents. In order to accomplish this, we must ensure that the census form does not become so complicated or so intrusive into personal matters that people simply will not respond. The more complicated the questions, the less accurate the

data will be. The more personal the questions, the more turned off people will become.

In short, we must be sure that each item on the census form will provide accurate information which cannot be obtained from other sources.

I will continue to work with the Census Bureau, public and private data users and the American public to help strike the proper balance for the enormous, complex task of conducting a census.

Mr. Chairman, included in my statement is my concern and my unhappiness over the fact that HUD has seen fit to make a trip to Moscow but not to the Dirksen Building. It seems to me, given the difficulty of this task we have ahead of us, all Federal agencies should be responsive to invitations from the Congress to appear.

Surely HUD is not run by one person whose absence could bring a halt to the activities. I regret very much they didn't see fit to come. I am expressing my unhappiness because I hope in the future Federal agencies will be more responsive to invitations from Congress regarding this very important issue.

I thank you very much.

Senator PRYOR. It might behoove us to go to Moscow and do this hearing.

Mr. DYMALLY. If they are as evasive as the Chinese are, we will never get any information.

Senator PRYOR. Please let the record show that this hearing is a joint hearing before the Subcommittee on Federal Services, Post Office, and Civil Service, Committee on Governmental Affairs, and the Subcommittee on Census and Planning, Committee on Post Office and Civil Service of the House of Representatives.

Of course, both sides of the Capitol are interested in the facts presented this morning and in the responses of our witnesses who are representing not only Federal agencies but also various groups in our economy and in our society.

Our first witness is Dr. Wendy L. Gramm, Administrator for Information and Regulatory Affairs, OMB. Dr. Gramm is accompanied by Ms. Dorothy Tella.

We appreciate both of you appearing this morning. I understand that the staff has put our witnesses on notice that there will be a 10-minute rule. You may read your statement or summarize it.

Dr. Gramm, all of your statement will be printed in the record. We are proud you are here today, and we look forward to hearing from you.

TESTIMONY OF WENDY J. GRAMM, PH.D., ADMINISTRATOR FOR INFORMATION AND REGULATORY AFFAIRS, OFFICE OF MANAGEMENT AND BUDGET, ACCOMPANIED BY DOROTHY TELLA, CHIEF, STATISTICAL POLICY BRANCH

Dr. GRAMM. Thank you very much, Mr. Chairman.

I might mention that Dorothy Tella is chief of my Statistical Policy Branch within the office of Information and Regulatory Affairs.

I would also like to add that I appreciate hearing the comments that both of you made this morning because I think they dovetail

very well into my responsibilities as Administrator for Information and Regulatory Affairs.

I will not read my statement [1] but I would just like to summarize some of the key points of OMB's, and specifically OIRA's, responsibility and role with respect to the census. I will also take back the comments to Director Jim Miller about the budget. I know that he is always happy to hear other people are concerned about increases in the budget as well.

But OIRA's role, specifically, with respect to the census is derived from the Paperwork Reduction Act. OMB has responsibility for policy and coordination of the Federal Government with respect to gathering, interpreting and disseminating statistics and statistical information. We also must, under the Paperwork Reduction Act, review information collections to ensure that the burden is minimized and that the data collected have practical utility. All forms, including the census questionnaires, must be cleared by our office and must be reviewed for these issues—burden and practical utility.

Furthermore, the Paperwork Reduction Act also gives us responsibility to ensure that the data that are produced are produced and published in a timely fashion. Our office also has responsibility to ensure that agencies collect and use data in accordance with the Privacy Act and other laws related to confidentiality.

Finally, under the Paperwork Reduction Act we have information resources management responsibilities, and what that means is that we must assure that information resources, such as computer systems or software, are acquired in an efficient and effective manner.

Now, to carry out these responsibilities that I have mentioned, first of all, OMB generally—not my office specifically, but OMB on the budget side—must review and approve budgets for the census as they always have.

Our office has chaired and continues to chair a Federal Agency Council, and that is part of our coordination function under the Paperwork Reduction Act. This Federal Agency Council is an interagency committee—an advisory committee to our office—that we established in 1984. Our purpose was to work with the agencies and get advice and input from the agencies concerning their need, or want, for information from the census. As you stated, Mr. Chairman, and as we will note, the agencies have a great desire for information and, very frankly, since Census is paying for the information—for the census part of the budget, at any rate—the agencies don't have much of a budget incentive to keep the cost down or the number of questions down.

We have chaired interagency committees—advisory committees—like this Federal Agency Council, not only for this census but also for the past three censuses—since 1960.

I also mentioned that we review questionnaires and information collections under the Paperwork Reduction Act. We have reviewed the test questionnaires and we will continue to review them for

[1] See p. 43.

burden on the respondent as well as practical utility and privacy concerns .

We are expecting to receive from Census very shortly the 1988 dress rehearsal forms. We will review them and would like very much to get as much public comment as possible on them. Our Paperwork Reduction Act amendments which were passed last year strengthen the role of the public in providing information on surveys and other forms—the paperwork burden the Government imposes on the private citizen. So we will be looking to ensure that the public has ample chance to comment on the burden aspects in particular and any other concern they may wish to raise with respect to the census.

Finally, with respect to the major systems and our information systems management responsibilities, we are reviewing the Census Bureau's acquisition of software and computers to ensure it is done in an efficient and effective manner.

I would be happy to answer any questions you might have on this issue.

Senator PRYOR. Dr. Gramm, my first question relates to the time burden reported by the Bureau to complete the census questionnaires used in the 1986 National Content Test. I wonder if you might comment on how the OMB determines whether the estimated respondent burden is acceptable? And, also, what is the time that it is going to take to fill out or answer the questionnaire?

Dr. GRAMM. We are required to estimate the burden. Basically we ask the agencies to estimate the burden that is being imposed—the time burden that is being imposed—per respondent for any information collection that is being imposed on the public.

Now, interestingly enough, the Paperwork Reduction Act amendments of last year are specifically requiring agencies to provide that estimate earlier in the process, and what we will be doing during the public comment period is asking the public what its estimate of the burden of filling out that form will be. That way we feel we will get a better and more accurate estimate of what the burden actually is on the public, rather than an agency's view.

We have found in the past that sometimes an agency's estimate of the burden hours is not accurate—it may often understate the actual amount of burden that is being imposed on the public. What we will be doing in the public comment period is specifically trying to get more information, more accurate information, about that burden and also, hopefully, get some comment back from the public about whether or not that burden is too much.

Senator PRYOR. Now, if you would educate me for just a moment, when is the public comment period?

Dr. GRAMM. Typically for any information collection, when the agency proposes a form, it must send it in to OMB for review, to my office. At the same time it sends the form to OMB for review, it puts a notice in the Federal Register that says it is sending that form over for paperwork clearance to OMB. Then there is a public record: anybody who is interested in commenting—on that form may comment, may have 60 days to 90 days to comment on that form to OMB.

We have a public docket. We open a public docket on that form. We take public comments from the public on that form, and then

at the end of the period we analyze them and make a determination about whether or not that form should be approved.

Senator PRYOR. When does this process start with the census questionnaire?

Dr. GRAMM. Now, specifically, with the census itself, we have approved a number of forms, 23 last year. These are test forms that will be used as pretests for the census itself. We have approved them as they have come in for the pretests since this whole process started several years ago.

Now, for the dress rehearsal form, we expect that form to come to us this month, in May. This is, in our view, the first important form to review for burden—for overall burden—from a Paperwork Reduction Act perspective. The earlier forms were forms that, since they were test forms, were to evaluate questions and content, et cetera, so the burden was less important than the dress rehearsal form which is more like the form the public will see. We will have a dress rehearsal form as well as the census form itself.

Senator PRYOR. You have no way to estimate how much time it is going to take for the average household to answer the questions by the census taker?

Dr. GRAMM. Well, the Census estimates, and I understand from the discussions that have been had so far, that last time the burden estimate for the short form was 15 minutes. For the longer form it was 45 minutes. Now, for this census, we don't know what the actual burden will be, but Census has opted for the general principle that forms for this census will be no longer than last time around. So the short form won't be longer than 15 minutes.

Senator PRYOR. Congressman Dymally and I have just seen the IRS fiasco—it is so typical of the Congress—we mandated the IRS to come up with a new income tax estimate form called the W-4. We had that nightmare and that horror, and we have heard from our constituents. We hauled in the IRS and they consented to revise the form. We are trying to prevent anything of that nature from happening with the census.

The reason we have these hearings is to try to catch things before they get too bad that we can't stop them, before that locomotive leaves the station and we can't run it down and halt it. So we are going to be monitoring this process very, very carefully at each step of the way, and we look forward to your cooperation and that of your office.

Dr. GRAMM. I might add I applaud that. One of the lessons we learned from the W-4 experience is that when you don't get public comment and public input with respect to the burden hour estimate in particular, you can have some problems. Under our amendments we have a greater responsibility and greater authority to gather that public input.

Senator PRYOR. Thank you, Dr. Gramm.

Congressman?

Mr. DYMALLY. Thank you very much, Senator.

Dr. Gramm, is HUD a part of the Federal Agency Council?

Dr. GRAMM. Yes.

Mr. DYMALLY. Do they attend the meetings?

Dr. GRAMM. They have attended the meetings.

Mr. DYMALLY. When you review the budgets is there allowance in their budget to attend meetings like this?

Dr. GRAMM. It is part of their staff work. It would not be included as a line item.

Again, I don't do the budgets but my suspicion is it would be included in their regular staff.

Mr. DYMALLY. How many people are hired by HUD?

Dr. GRAMM. I don't have that at the tips of my fingers, but lots.

Mr. DYMALLY. Two, three? [Laughter.]

Dr. GRAMM. I don't know. But I could get that for you. There are many, many.

Mr. DYMALLY. In the course of your Agency Council meetings, do you urge cooperation with the Census Bureau and attendance at these important congressional hearings?

Dr. GRAMM. On these hearings?

Mr. DYMALLY. Yes, when your Agency Council meets, do you discuss the importance of the census count with them?

Dr. GRAMM. Yes. You know, I think the whole purpose of the establishment of the Federal Agency Council is the important——

Mr. DYMALLY. Sometimes bureaucrats attend meetings and don't know why they are there. They just come. I want to be sure HUD understands why you call these meetings, not to give somebody time off; but they are important meetings.

Do you think it is appropriate for OMB to communicate to HUD that the Congress is very unhappy about their absence as a member of your Agency Council?

Dr. GRAMM. You mean as a member of the Federal Agency Council, unhappy—that they are not attending these hearings?

Mr. DYMALLY. Yes.

Dr. GRAMM. I will certainly pass that message on to them.

Mr. DYMALLY. I want to be sure they understand it.

Senator PRYOR. You might make a little phone call and say you were conspicuous by your absence this morning.

Mr. DYMALLY. I have got a very lengthy technical question and it is written, so I am going to be very slow in reading.

OMB is responsible for establishing standard classifications used for Federal reporting and administrative reporting. The rationale of categories used in the 1980 census questionnaires were not consistent with the OMB standard. Thus special tabulations were required to provide the data consistent with other Federal agencies' records.

Has OMB evaluated the race and Spanish origin categories included in its standard and the categories proposed by the Bureau for the 1990 census to ensure accuracy and consistency in the data collected in 1990?

In other words, there were some inconsistencies in what you set up as your standard and what the Census Bureau did subsequently.

Ms. Tella, you want to respond?

Dr. GRAMM. Dorothy Tella will address that.

Ms. TELLA. Yes, sir, we have reviewed the race and ethnic standards. At present we are in the process of reviewing all OMB statistical standards and looking at the race and ethnic standards in that context.

As you pointed out, they are unlike most of our statistical standards in that they are established both for statistical and administrative use. The principle of these standards is to set very broad categories that don't restrict agencies. Agencies can collect more detailed information on race and ethnicity as long as it can be aggregated into these four very broad racial categories.

I think there is some confusion that some members of the public don't understand that agencies don't have to use only these four racial categories but can use any other more detailed categories as long as the final statistics can be aggregated if need be into the four that we have.

Dr. GRAMM. So there wouldn't be any inconsistency as long as you can aggregate the individual parts into the categories so there won't be overlapping and therefore confusion from a statistical perspective.

Mr. DYMALLY. Ms. Tella said something I wasn't aware of. In other words, agencies after or before the census can use their own racial identification or they can expand it beyond that which is listed on the census form?

Ms. TELLA. They certainly can. They can expand their categories beyond the four broad categories that are defined by OMB. The requirement is that whatever categories are used can be aggregated into the four that we have, which are black, white, American Indian and Alaska Native, and Asian and Pacific Islander. I believe it is true—in every case I am aware of—that there is no conflict. There may be some instances that I am not aware of where there is a conflict and we would like to be able to review it if that is so. If you have some examples where there are problems, we would like to know about them.

Mr. DYMALLY. Do you include independent agencies in your Agency Council? If you do, is the FCC in your Agency Council? I didn't see them listed but let me pursue it. Someone is saying yes and someone is saying no in the back.

Dr. GRAMM. What we did in 1984 was to send a letter to all agencies, including the independent agencies, and ask them if they would be interested in serving on the Federal Agency Council and specifically did they use data from the census and what was the use for it. And I understand they did not have a representative on the Council.

Mr. DYMALLY. My question was intended to lead up to another one. Because the telephone is so important in the census taking, it seems to me that the FCC, based on the fact that they do regulate certain practices and certain regulations with reference to the telephone, that we might want to have them involved in this exercise so that there is nothing that will restrict the use of the telephone. It might be helpful to have them communicate——

Dr. GRAMM. Also, under the Paperwork Reduction Act, our office has information policy and information resources management responsibilities. I think that if we feel that it might be important to bring in the FCC or ask them some questions that that can be done.

Mr. DYMALLY. Thank you very much, Mr. Chairman.

Senator PRYOR. I am a little confused, Dr. Gramm. Is the Federal Agency Council not involved in the 1990 census? Is that correct, are they not involved?

Dr. GRAMM. They are. We established a Federal Agency Council for the 1990 census. We sent the first round of letters in 1984 to start the process.

Senator PRYOR. Have they been participating in the meetings you have been having for the 1990 census? I understood you had said they had not been there.

Dr. GRAMM. Yes.

Mr. DYMALLY. Not the FCC?

Dr. GRAMM. The FCC did not participate in those.

Senator PRYOR. I think you just touched on it, I don't know that you called it this, the information locator system. Is that going to be used in the coming census, the sharing of information with the various agencies?

Dr. GRAMM. The information locator system is a system that we have set up to help identify what data are available from the different forms—where an individual might go if he wanted information on any specific topic, for example, crops, production of soybeans, or whatever—where that information might be available. It is a locator system for users to help them identify where the data are.

Senator PRYOR. Dr. Gramm, has OMB looked at the cost and the cost estimates for the 1990 census?

Dr. GRAMM. Yes. The budget side of OMB has.

Senator PRYOR. Have you looked back at 1980 and do you see a sharp rise in the proposed costs? Have you determined why there is such a sharp rise of, say, what? It is double, a hundred percent increase.

Dr. GRAMM. That is right; $1.1 billion——

Senator PRYOR. Why are we looking at such a huge increase?

Dr. GRAMM. I know that part of that increase is due to an increase in the number of households and also just price increase, general price inflation. And as for how the other part breaks down into more computer services, more updating of equipment, et cetera, I don't know the details.

Senator PRYOR. This is one of those challenges that we have. It is almost like paying the interest on the national debt. It is something we have got to do. We have got to do the census in 1990. We are obligated to do that. And what we also have to do is watch the costs and watch the costs very carefully.

Dr. GRAMM. Well, I would be happy to have the budget side of OMB provide some additional information about the cost of the census and the reasons for the extra increase.

[The information referred to follows:]

DECENNIAL CENSUS BUDGET INCREASE BETWEEN 1980 AND 1990

The total cost of the 1980 census was $1.1 billion. The current budget for the 1990 census is $2.6 billion for fiscal years 1986 through 1992.

The projected increase of $1.5 billion between 1980 and 1990 is explained as follows:

The general increase during the 1980s in the prices of goods and services purchased by the Federal government accounts for about $0.5 billion.

An increase of about 20 percent in the number of households that must be reached by the census accounts for about $0.2 billion.

Enhancements account for $0.5 billion. These enhancements include an automated address file, which will enable the Census Bureau to identify mail nonrespondents more effectively for follow-up purposes; increased automation of data processing system; and an expanded outreach program.

The remaining $0.3 billion reflects factors that the Census Bureau anticipates will add to the cost of counting the population in 1990 as compared with 1980. These include a projected drop of 5 percentage points in the mail response rate that will necessitate more extensive personal follow-up.

Senator PRYOR. Thank you, Dr. Gramm.

Congressman.

Mr. DYMALLY. One final comment, Dr. Gramm. I think you are the closest person here to the executive branch, OMB. All the agencies must get approval from OMB of their budgetary requests. I just want to make a final comment about HUD. I think it is a form of bureaucratic arrogance for an agency as important as HUD to refuse to show up at this hearing, considering the fact that households are part of the whole Census Bureau exercise. I can't imagine an agency like that would give an excuse they had a problem and couldn't come to this hearing. I am appalled. I am very annoyed about it. I wish you could somehow convey that message back to HUD.

Dr. GRAMM. I will do so.

Senator PRYOR. I might add, too, Congressman Dymally, I think the two new items that are planned for the 1990 questionnaire relate to housing: congregate housing and housing quality. So, eventually we are going to ask them to come up here and talk about some of this.

Dr. Gramm, we thank you very much.

Dr. GRAMM. Thank you.

Senator PRYOR. It is time for our next witness, Mr. Jerry Berman, Chief Legislative Counsel, American Civil Liberties Union, accompanied by David Burnham.

TESTIMONY OF JERRY J. BERMAN, CHIEF LEGISLATIVE COUNSEL, AMERICAN CIVIL LIBERTIES UNION,[2] ACCOMPANIED BY DAVID BURNHAM [3] AND KAREN RINGEN, ACLU

Mr. BERMAN. Mr. Chairman, on behalf of the ACLU I want to thank you for the opportunity to testify before you this morning on issues of privacy and confidentiality and the census. I want to introduce, on my left, Karen Ringen, of our staff, who has done considerable research in this area, and Mr. Burnham needs no introduction.

We testify today for one purpose: to simply urge the Congress in planning for the 1990 census to undertake a careful and systematic examination of Administration plans and procedures for protecting the privacy and confidentiality of census data. We all know the importance the census plays in our lives today, its importance in determining the statistics by which we distribute everything from welfare funds to deciding how the Voting Rights Act will be enforced.

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[2] See p. 57 for Mr. Berman's prepared statement.

[3] See p. 68 for Mr. Burnham's prepared statement.

But it must be emphasized and we must recognize that when the 1990 census is complete, it will constitute the ultimate data bank on American citizens and persons in this country. The census that will be conducted in this 200th anniversary of the census, the original conducted under the direction of then Secretary of State Thomas Jefferson, is quite different from simply counting population to determine that the House of Representatives districts are proportioned fairly among the States.

Today, driven by a multitude of public policy purposes which seems to grow as government grows, the census involves the compulsory gathering of detailed personal information on 250 million people including name, age, sex, marital status, income, ancestry, employment, health, financial status, for a very large sample of citizens and many of these questions are compulsory for all.

It must be emphasized that the questions are compulsory. They are not voluntary and that citizens are under penalty of law for not answering. This makes the data even more sensitive.

In urging the Congress to undertake a privacy and confidentiality study, we are not suggesting that census data is being misused or the census bureau is not concerned or deeply concerned about these matters. Quite the contrary.

Since last summer we have had several meetings with Commerce and Census officials to discuss privacy and confidentiality matters. Based on these discussions we believe the Census Bureau and Congress are dedicated to maintain the confidentiality of that data.

But there are reasons for Congress on its own to make its own examination of the confidentiality procedures and practices that the Administration has in mind and to put on the record for the public and to establish confidence in the census that privacy and confidentiality are being protected.

Now, let me state the reasons why it is critical:

First, the sensitivity of the data.

Second, while there have been few documented abuses of the use of the census data in the past in this country there have been abuses and we have to keep that in mind. Census data was used, as Mr. Burnham will point out as an expert on the history of the census, in the West German experience and the experience in Europe, and in our own country it was used to locate draft dodgers during World War I, it was used to locate concentrations of Asian-Americans for internment at the outbreak of World War II.

Third, the viability of the census ultimately turns on public confidence that the data is being protected from misuse and abuse. Only this weekend appearing in The Washington Post and New York Times were stories that millions of people may be boycotting the census in Germany. In Bonn, West Germany, they have not been able to hold a census for 17 years because a considerable minority of the population fears the enormous collection of data, its potential misuse, and that the census is part of what they call "a rising surveillance society."

Similar problems have occurred in other Scandinavian countries, Sweden, Norway, the Netherlands.

Now we come closer to home. While I didn't emphasize it in my prepared testimony, only the other day in the L.A. Times questions have been raised about the viability of the census in this 1990

census. Millions of people in this country are here illegally and it is just wrong to assume simply with the passage of the immigration law they are going to get amnesty or relief. A lot of people are going underground and will remain underground, and there are questions that could complicate the census.

So it is important for Congress to establish that data will not be misused or used for improper purposes such as law enforcement.

What I want to do today in my remaining minutes is simply to suggest a line of inquiry which I think would be useful to take up with the Census Bureau, to establish a record, and then make a suggestion about some of the current issues and ways you might be able to improve public confidence in the census.

First, I think that you should ask the Census Bureau the necessity of questions. I think that is one of the reasons you wanted to talk to HUD this morning. Why are these questions being asked? It is not only a cost question. Every question that is added to the short and long form has the potential of making the information ever more sensitive and every question should not only be measured against cost but in terms of privacy and confidentiality of citizens. The ability, as data becomes more and more detailed, to identify key target populations within a society almost down to the individual becomes more possible.

Second, the Congress should examine again and not take for granted that all of these questions should be compulsory. It is the ACLU's position based on privacy concerns that questions of race and ethnicity, for example, should be voluntary if the Census Bureau is not prepared or the Government is not prepared to strip away individual identifiers from the ultimate data file. What is the argument against such a procedure? What is the argument for not allowing many of these questions to be voluntary? Would it really detract from reliability of census data ultimately or, in fact, make citizens more forthcoming?

Third, I think the Congress should examine security measures enforced by the Census to protect the data that they collect. For example, are their communications lines encrypted? Is the computerized data down at the Census Bureau protected against unauthorized access and penetration from the outside in this high-tech age of surveillance?

Another question is, are the enumerators, who are mostly temporary hires, trained in confidentiality? Are there techniques for monitoring, and auditing in place to know that enumerators are not turning over census data to any other unauthorized person?

Fourth, and most importantly, which brings us back to the issue of immigration law, Congress must examine the procedures that the Census Bureau employs for protecting the confidentiality of census data disseminated by the Government both to Government agencies and to the private sector to ensure that it does not result in disclosure of personal information which can be used to the detriment of any person.

It is common knowledge that other government agencies and private sector marketing firms and companies use census data in combination with other data with high-powered computers to try and identify key population groups in this country for different purposes, from law enforcement to marketing.

Now, the Census Bureau is well aware of the problem. They turn over data when they make it public in conjunction with certain disclosure avoidance techniques to prevent other computer users disaggregating the information down to where they could identify a particular person from census data in combination with other data.

The problem, however, is that the census protocols are developed mathematically. As I pointed out in my testimony, one census official has just said, "We do not have the monies to field test or the staff to perform a thorough disclosure risk analysis so its determinations, although based on information and expertise, remains subjective."

We think Congress could do more in this area to understand disclosure avoidance.

One avenue is to request testimony from outside experts who use census data for marketing and political and other purposes to see how sophisticated they can be in terms of using computer techniques to break down census data. Another is to appropriate the funds for the Census Bureau to conduct such a risk analysis, which would require some field testing of the protocols and testing against their own dissemination practices. You take the information and see whether other number crunchers can break it down. If they can't, then you have more reliability.

The most important inquiry is for Congress to make is to ensure that other agencies are not able to and will not use census data for law enforcement and other purposes. Is the IRS using census data in a way which allows them to identify non-payers and underpayers of taxes? Does the INS have plans to use census data to try and locate illegal aliens in this country?

Under section 8, title XIII of the census law it provides that "In no case shall information be used to the detriment of any respondent or other person to whom such information relates, except in prosecution of alleged violations of this title." It is clear that covers the Census Bureau and its use of data and its purpose for disseminating it to other agencies, but it is not clear that it applies to other agencies' use of census data for law enforcement purposes.

In our view such uses of census data, regardless of law enforcement agency responsibility to enforce the laws of the United States, would violate citizen privacy and seriously undermine the integrity of the census. Congress should determine what the situation is and it should even consider in the light of the immigration question one solution which is to amend that title to make it clear that no agency, Census Bureau or agency of government can use census data to the detriment of any group or person in this country so that people will be forthcoming and answer the questions in 1990.

That brings me to the end of my testimony, Mr. Chairman, both Chairs.

Simply, my final comment is that the census is essential to the functioning of representative democracy. The same holds true for protection of citizens' privacy in the computer age and the issue of privacy and confidentiality of census data must be addressed to ensure continuing protection of privacy and continuing public support and cooperation in the census process.

Thank you.

Senator PRYOR. Thank you very much, Mr. Berman.

Mr. Burnham.

Mr. BURNHAM. Good morning, gentlemen. I guess I am here in the role of a historian. For the last 10 years, I have been a reporter with The New York Times and working on computer issues and how the computer affects government. I wrote a book in this period called "The Risk of the Computer State" and I am now working on a book about the Internal Revenue Service.

Senator PRYOR. When you complete that I want to see it.

Mr. BURNHAM. With Jerry, I would like to begin by saying that obviously the census information is the most vital kind of information in our society. It is absolutely essential for the functioning of representative democracy as we know it. It is absolutely essential to the functioning of our economy. If because of fears by the public, if this census is undermined, if the information is destroyed, our country could be in very serious trouble. That is why I agree with Jerry. We want to take every possible step to assure the public that the information will not be misused.

The dangers are not hypothetical. There have been real occasions, both in this country and in other countries, where census data has been used to run down target populations. As Jerry said, in 1918 in this country the Census Bureau gave the Justice Department information from the Census Bureau to track down draft dodgers. It was used. That is according to Vincent Baraba, who was the Director of the Census during both the Nixon Administration and the Carter Administration.

The story in 1941 in this country is more complex. The Census Bureau did not give the Army names and addresses. They resisted that. But Tom Black, who later became the Supreme Court Justice, tells a story in the Oral History Library at Berkeley. He explains how the Census Bureau came in and he was in charge of the Justice Department's participation in the round-up of the Japanese-American citizens on the West Coast.

He explains how the Census Bureau came in and provided the Army and the Justice Department the exact number of people living in each sector of, say, San Francisco. They would then put up notices saying all Japanese-Americans living within this sector please report to such and such a place at 4:00 p.m. They would know there were 233 Japanese-Americans who should report because the Census Bureau had told them that. The whole round-up was accomplished with the help of the Census Bureau data.

That was not public at the time. The census had been completed in 1940 and it hadn't been published. It was run off on a special run for the Army. Japanese-Americans say it violated the law because the information was being used to their detriment even though it did not give individually identified data.

Now, the German Army, when they took over the Netherlands in World War II, immediately went to the Census Bureau and they used that information combined with the information in the City Halls of the Netherlands to track down the Jewish population. That is one reason why since 1971 the Netherlands has been unable to hold any kind of national census. Fifty percent of the people living in the cities of the Netherlands say they will not sign,

not fill out census information. Twenty-five percent of the people living on the countryside of the Netherlands say that.

The situation in Germany is similar. They have not had a census in Germany since 1970 because of the strong opposition of the public. This bubbled up into a very powerful political movement about three years ago. The matter of the census went to their supreme court. Their supreme court enjoined their census bureau from holding the census. They held hearings. They issued a ruling, saying, that every German had a right to informational self-determination. They ordered the government to submit a new law greatly restricting the census and what it would hand over and how the information would be used.

The government did that. It went to the Bundestag, the Bundestag came back with a new law but the residual political concern about the impact of the census remains. The German government next week will begin a census. The polls suggest that 15 to 20 percent of the German people are not going to cooperate with this. That will mean that the information may be so inaccurate that it is useless. We want to be very careful that we do not get that kind of political concern going in this country.

The Japanese-Americans are extraordinarily sensitive to this, as they should be. There has been testimony from some of the Hispanic community of great concern. And the census data is to essential to our economy and our political life and the functioning of this country to endanger it by sloppy or misuse of the information.

It is a very complicated question. You are interested in the IRS, sir. The IRS about three years ago decided it wanted to use marketing lists to try to track down people who do not pay any taxes. They went to a marketing company and bought a marketing list. The marketing list is based on census data. The marketing companies take the census tract data and then they merge it with telephone data from the telephone books and data from the State Motor Vehicle Departments, and with that they try to develop a list of every person who lives in every census tract. They reaggregate the information.

What the IRS did was they bought one of those lists and they did a search to see if they compared that commercial marketing list with the IRS list of people who had paid taxes whether they could identify the nonfilers. They never made a public announcement about this. It is my understanding that the experiment did not work.

Senator PRYOR. What year was this, Mr. Burnham?

Mr. BURNHAM. The experiment was two years ago.

It did not work. The marketing data at this point is sufficiently inaccurate that there was too many mismatches and it didn't work. But we are collecting more and more and more information. We are able to merge more and more information and the threat lies there. It is a very difficult position for the Census Bureau because their information is not the type that you can directly identify individuals with. But you have all these other interests like the IRS, like the Immigration and Naturalization Service that would like to do it.

It is essential, as Jerry Berman said, for the Congress to carefully examine these issues and look for them.

Thank you very much, sir.

Senator PRYOR. Mr. Burnham and Mr. Berman, I have got to go. We have a vote on the floor. I am going to race over to the floor and run back to the Agriculture Committee, where they will undoubtedly accept the fine amendment I am going to propose. Then I hope I will come back here.

I am fascinated with this part of this discussion. I have one question about penalties. I am concerned about what occurred in the Netherlands and what is going on in Germany now. I hope that doesn't happen here.

Here is a question from the 1980 census form: "If this person is a female—How many babies has she ever had, not counting stillbirths?" Then there are circles to fill in. If this lady in the household said, "I don't want to answer that question," what happens? What is the punishment? What is the penalty? Do you know?

Mr. BERMAN. There are statutory penalties under the statute.

Senator PRYOR. We may ask that to someone else later on.

Mr. BERMAN. I think the Census Bureau is very sensitive to these issues and I think that while they don't have a systematic training of their enumerators I think they let people leave the question blank. You will find they use a lot of statistical techniques to try to fill in blank data. But if they wanted to use the power of the statute, they can say you have to answer that question and come back to the door and say: "Fill in that question."

Senator PRYOR. I am sure that with some of our future witnesses, or subsequent witnesses this morning, we would like to get into some of that.

We are also honored this morning to have the new Congresswoman from Maryland, Connie Morella, with us today. We are very honored that you are here.

Mrs. MORELLA. Thank you, Senator Pryor.

Senator PRYOR. I am going to leave this hearing in very good hands, and you divide up however you want: to make a speech or make a statement or ask any questions. I will be back shortly. Thank you.

Mr. DYMALLY [presiding]. The Chairman recognizes Mrs. Morella.

OPENING STATEMENT OF CONGRESSWOMAN MORELLA

Mrs. MORELLA. I want to thank the Chairman who left, Senator Pryor, who has been my neighbor, as a matter of fact, in Montgomery County, Maryland, for many years, and our Chairman, Mr. Dymally, our Subcommittee Chairman.

I will be reviewing your testimony. I already can see there are some fascinating questions that can be asked of Mr. Burnham, and I look forward to hearing the other testimony.

Naturally we all hear very much about the decennial census as it relates to education, transportation, our business climate, the elderly, and we care about how much it is going to cost. We want to make sure the questions are appropriately posed so we don't have problems, some you alluded to I think in the Netherlands and West Germany, and we care the money is well spent so we can utilize it.

So I am here to learn and ask questions and profit by what you can tell us, and hopefully offer some input. Thank you very much.

Thank you, Mr. Chairman.

Mr. DYMALLY. I have a couple questions.

Mr. Burnham, are you still with The New York Times?

Mr. BURNHAM. No. I left. I am working on the book about the IRS.

Mr. DYMALLY. I had a memo they are doing some very indepth coverage about the census already.

Mr. Berman, what if I absolutely refuse to participate in the census, exercise some unknown legal right that I don't have?

Mr. BERMAN. I think they can prosecute you and put you in jail.

Mr. DYMALLY. Misdemeanor or felony?

Mr. BERMAN. I think it is——

Mr. DYMALLY. We will get that from Dr. Keane.

Dr. KEANE. You cannot be put in jail. You can be fined.

Mr. BERMAN. The fine?

Dr. KEANE. I don't know. I haven't heard of one levied.

Mr. DYMALLY. So it is a misdemeanor fine. But there is a penalty.

You were talking about some protection in the law to avoid disclosure. Do you have any specific ideas?

Mr. BERMAN. Yes. The suggestion I make in my testimony is that it be stated in title XIII that no agency may use census data to the detriment of any person or target population in the country. That would I think assure people who may be afraid of answering questions in the current climate of the immigration law that the census data will not be used that way.

That would have the added advantage of making people forthcoming, but also protect the privacy and confidentiality of that data and ensure that the census isn't a form of self-incrimination. There are people who are going to be asked to answer the census who are in this country illegally who aren't entitled to amnesty, for example, who could be deported tomorrow.

You want them to answer the question. You want to know what that population is.

Mr. DYMALLY. That is a subject of our next hearing, on June 1 in New York—amnesty.

Mr. BERMAN. The issue is whether you want to change the dynamics of how the immigration law is going to be implemented. Sooner or later it is going to be implemented and there is a population which is entitled to amnesty and there is a population which is not, and I don't think they are all going to pack up their bags and leave this country so they are going to be part of the census.

The second level you have to examine is because we are concerned about voting rights and nondiscrimination and welfare programs. Many of us want more information so that Government funds are properly distributed, and the Voting Rights Act is properly enforced. We want information on the books. But it has a two-edge sword. And you have to examine how specific those questions get. For example, it has been suggested in addition to ancestry and ethnic and race questions they might ask a country-of-origin question. Where do you come from? For many communities that is information that would be interesting to know, how many Lithuanians are here, how many came from Poland, and so forth, and it

may even increase your political clout, the importance of your population in the community, make you proud of your ethnicity.

But also, if you ask country of origin and people answer, because they are subject to a penalty or if they are honest people and they answer the question, then you know that there are 3,000 Salvadorans in Dubuque, or you would find surprising populations or concentrations of aliens without legal status in Iowa.

And what does that do? Doesn't that at least make it a temptation on the part of the INS and the Justice Department, to say: Geez, the more data we ask for the more questions we ask, the more we will be able to enforce and target our resources for enforcement purposes of the immigration laws. I think that is misuse of the census data.

It would be a misuse of the census data, and if it happens, I think that the problem that West Germany faces will be facing this country.

Mr. DYMALLY. You have just whetted the Committee's appetite for the June 1 hearing but because it is such a very, very serious and complicated issue I don't want to pursue it because we are going to have a holiday, but I think you had a comment you want to make.

Will you identify yourself?

Ms. RINGEN. Karen Ringen, ACLU.

I wanted to mention that in West Germany it goes beyond the people's fear of answering the questions. They are having trouble hiring enumerators to even ask the questions. I don't think we want to see something like that happen here.

Mr. DYMALLY. Mr. Berman, I suspect the Census Bureau could truly say in 1941 we did not give out any names. We just gave them a census fact. You believe that to——

Mr. BERMAN. At the start of my statement I made it quite clear that I believe that even if we got the penalty structure wrong that the Census Bureau cares very much about these issues and is doing everything it can to ensure that the tract data cannot be taken apart and individuals identified.

However, they have not done field testing, have not had the monies to do that kind of field testing. Congress could appropriate the monies for that kind of field testing of tract data to ensure that it can't be, as David pointed out, reaggregated with other data to identify individuals.

I think when the census test says it is so expensive to try and do that, even in a high-tech computer world, you might as well hire a private investigator if you want to identify a particular person. But, if you are looking for Salvadorans or concentrations of particular groups, it might not come down to identifying a particular individual but have systematically block by block and tract by tract where you ought to be looking for certain kinds of people.

Mr. DYMALLY. Was that not the case in 1941? They used tracts?

Mr. BURNHAM. They used the tract information. They did not give the individual names. They resisted. They used census tracts but they did do a special run for the Army and the Japanese-Americans argue that it violated the law because it was used to harm them; that round-ups into the detention camps harmed them, even though they did not give out individual data.

Mr. DYMALLY. What if the EEOC used some of that information to set affirmative action goals? Do you think this violates the rights of a majority of the people?

Mr. BERMAN. The statute is clear. It is to the detriment of any person. I suppose some other population who opposes affirmative action could say it is to the detriment of me or my ethnic group. But I think it is clear that with the compulsory nature of the data, if it was used, if you handed out census information that is illegal to the FBI, that would violate the statute and it would be a form of self-incrimination since the questions are compulsory. I think the issue is to the detriment of any person so EEOC's use is quite different.

Mr. BURNHAM. One other thing you might look at. The Census Bureau spends a great deal of time trying physically to protect the data that they collect and they have very elaborate procedures to do that. But with such powerful and useful information it is always a danger that it could be stolen. And it is something I think the Committee should look at. I recall for the Committee that in Canada about 6 months ago an employee of the Canadian tax agency, whose name I don't remember, walked out with a box of microfiche with tax information on about half of the Canadian population. He did this as a protest. And the tax agency was very, very embarrassed.

I am sure the Census Bureau has guards and all of that. But it is a danger.

Another case just comes to mind. About 2 years ago the head of computer security of the Immigration and Naturalization Service was found to have made an illegal entry into the INS computer from his home and was illegally selling green cards. He had sold 8,000 of them. He is in jail now. That was the head of computer security of a major agency.

So the concern about the physical protection of this data has to be very, very high. As I say, they are worried about it, but I think that worry should be encouraged.

Mr. BERMAN. I think we are saying we think they are doing the job, but while you are planning, you have the power of oversight to go beyond speculation. You can get them to document their security procedures for you. We all assume—and I am not using this as a derogatory remark to the Census Bureau—that our embassy in the Soviet Union must have been protected, and it turns out to be wholly unprotected, and many of our other embassies. There you would have thought there was adequate security—you just believe it.

Well, you can't believe it anymore. And I think you ought to take a look at how the data is protected, how these temporary hires are trained. What does it mean? You want people who understand the community to collect data in the community. That is fine. But there are people in the community who want the data for other purposes, political purposes and so on.

Senator PRYOR. Mrs. Morella?

Mrs. MORELLA. There has got to be some way we can try to work these safeguards out. I am really glad you pose them and I have been trying to figure out, reposing the question to you, what can we do. And I agree the physical protection aspect is politically im-

portant and yet it is going to be so difficult. So we will be leaning on you, Mr. Berman, to try to work something else.

I wanted also to pick up on what you said about a country of origin. I guess you could say a country of citizenship. That might take care of that, because my ethnic community and ethnic communities throughout the Nation are concerned about that question not reflecting ancestry and rather they would prefer to have it be a country of ancestry so you can trace what your population is in terms of background rather than just country of origin which would pertain only to that specific person.

Mr. BERMAN. But, you see, that is a nice thing to be able to do and maybe it is important to know your roots. But there are considerable populations in this country who are at risk by answering a country-of-origin question.

Mrs. MORELLA. Would ancestry be all right? They say if you didn't put country of origin and put simply your citizenship, you can refer back to two generations with ancestry.

Mr. BERMAN. That would be fine, but we are not going question by question through the census but saying that either or in working with the Census Bureau that some of the questions be scrutinized in terms of not only its costs or its importance for public policy but its impact on other issues such as confidentiality, privacy and law enforcement.

Mrs. MORELLA. I firmly agree. Simply when you made that statement I have seen that was one of the questions proposed, and I feel that it should be altered to reflect ancestry.

Mr. BERMAN. I think that is a good solution.

Mrs. MORELLA. I understand the Bureau has experienced lower than expected response rates in some of the 1990 test censuses. As a result, the expected mail response rate for 1990 has been reduced, I understand, by 5 percent. What has the Bureau done to streamline the questionnaire to reduce the burden on the general public?

Mr. BERMAN. Well, that is a question for the Census Bureau. I think they are still in the stage of looking at subject matter, how is the quality of housing. As I understand it, next year is when you determine what questions are going to be asked and that streamlining is on the drawing boards now. We are as interested as you are in how streamlined the questioning is going to be.

Mr. BURNHAM. Mrs. Morella, I haven't done any reporting on this in about a year, but it is my understanding that the drop in the number of people willing to answer the mail questionnaires, the sample questionnaires, was in the big cities where there were probably large numbers of illegal immigrants. The Census Bureau might be able to answer on this.

I suggest that perhaps this concern we have seen turn sour in Germany and the Netherlands may be growing in some segments of the population and perhaps they have some surveys indicating what are the reasons for this. Is it that people don't want to answer certain questions, or is it a more general fear of the census and the rise of the computer state, if you will?

Mrs. MORELLA. I will redirect that question to the Census people, and I am glad to get your response to it, too.

I am curious, though, about what the Federal Republic of Germany and the Netherlands do without any kind of census tract. Have there been problems posed?

Mr. BURNHAM. It is a problem for them. Both countries are in violation of treaty obligations to the European Community, which requires the countries to have regular censuses. In the Netherlands there is quite a lot of data, unlike the United States, collected by the municipalities. And they can use that data in a limited way for planning purposes, schooling and housing, so they have sort of a way to get around it, which we do not have in the United States. We do not have a requirement that every citizen register with the City Hall and both in Germany and the Netherlands they can use that data for quasi-planning purposes. We don't have it. If our census goes, it would be, I think, a more serious problem.

Mrs. MORELLA. Thank you.

Thank you, Mr. Chairman.

Mr. DYMALLY. Thank you very much, the witnesses.

We will hear from Dr. Keane. Do you want someone else to join you?

Dr. KEANE. I think when we get to the questions and answers.

Mr. DYMALLY. Your shoulders are broad enough to take the heat.

TESTIMONY OF JOHN G. KEANE, PH.D., DIRECTOR, BUREAU OF THE CENSUS,[4] ACCOMPANIED BY PAULA SCHNEIDER, CHIEF, POPULATION DIVISION; ART YOUNG, CHIEF, HOUSING DIVISION; AND NAMPIO McKENNEY, ASSISTANT CHIEF, POPULATION DIVISION

Dr. KEANE. Thank you, and good morning.

In response to the Subcommittee's request I shall briefly summarize each of the topics that you asked me to address and they were the following five: the process for determining our questionnaire subjects; the subjects we plan to include in the 1990 questionnaire; questionnaire design issues; the data products; and an update, a brief one on the family of mini-computers contract.

In that order, first the process for determining questionnaire subjects. Selecting the questionnaire content is one of the most important preparatory actions we must take in planning the census. Given the many important uses of the census data, it is essential that the questionnaire include those subjects and questions that will yield the data to meet our Nation's need in the 1990s.

In determining the questionnaire content for the 1990 census, we operated under the important assumption that there should be no increase over 1980 in the questionnaire content for the 1990 census. Over the last 5 years we have held discussions with officials and planners at Federal and State and local government levels, with members of the business community, numerous and varied individuals in the academic community, minority group leaders across this land, and the general public. And these contacts include, for example, 65 local public meetings and those 65 in turn gave an opportunity to offer 5,000 people of varied interests to talk about the 1990 questionnaire.

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[4] See p. 76 for Dr. Keane's prepared statement.

Because of our extensive consultations with data users, the 1990 census questionnaire truly can be considered a national document. Not often put in those terms but I suggest it. As we held discussions with data users, we heard many, many more legitimate and valid data needs than we could reasonably see.

A general principle governed the selection of census content and that is the census must be aimed at data needed to fulfill legal mandates, implement government programs, or meet broad societal needs.

We tested question wording, format, and sequencing to help determine which of the many valid needs could be met best by the census.

The 1986 National Content Test was our main testing vehicle This year we are conducting a special urban survey to further test selected population and housing items.

Second, the subjects we plan to include on the questionnaire. Both the short and long form questionnaires will be about the same length as those for the 1980 census. Although we are eliminating more topics than we are adding, we plan to expand some, such as education and disability, so there is little net effect in the number of questions or in the questionnaire size. I have detailed the changes in my written testimony and will just highlight some of the major ones here.

The population topics that we ask for everyone will be the same as in 1980. Most of the housing topics that will be asked for all housing units will be the same. I will note two changes, though. We are dropping the question on access to living quarters. Secondly, we plan to add a question that will ask whether meals are included in the rent. This item will help produce more accurate rent statistics as well as identify group living arrangements primarily for the elderly. We have referred to these as congregate housing.

Last year, we reported widespread support for and use of housing data on the short form. Over the last year we have received further evidence from local planners on their support for the housing data.

We are dropping 3 population subjects from the sample questionnaire because our discussions with data users reveal limited uses for the data. These topics are weeks looking for work in the previous year, activity 5 years ago, and marital history which is a series of questions. We are not adding any new sample population subjects but we plan to expand some of the subjects.

We plan to eliminate four sample housing subjects, again, because data users reveal limited uses for the items. The four are the number of bathrooms, the number of stories and presence of an elevator in a structure, the type of cooking fuel and the presence of air-conditioning.

In summary, we believe the subjects we plan to ask will adequately meet data needs for the 1990s without imposing an undue burden upon the public.

Third, the questionnaire design issues. If we are going to take a self-enumerating census by mail and collect all the data the Nation needs, a large segment of the public must be able to complete the questionnaire. That is why we are giving considerable attention to questionnaire design issues to improve questionnaire wording and format.

The 1986 National Content Test and 1987 Special Urban Survey are part of our questionnaire research program. We have also initiated the Questionnaire Design Project to conduct further research on the design and wording of the questionnaire.

The project has already led to the redesign of some features of the questionnaire. As later stages of the project are completed there may be further minor changes to the questionnaire as a result. The long-term goal of the project is to suggest possibilities for further research related to the 2,000 census questionnaires.

We realize that not every household will have an adult capable of filling out a questionnaire accurately and completely. I want to emphasize that a person's inability to fill out the questionnaire does not mean that he or she will not be counted. We have built into the census plan procedures and programs to deal with the problem. Among these are telephone and walk-in questionnaire assistance centers, foreign language questionnaires and translation guides, and household visits by census enumerators.

Fourth, the data products. Producing and disseminating data products are the culmination of a successful census. All of our census plans are geared to meeting the required dates for the release of apportionment and redistricting counts as we did for 1980. One of our major goals for 1990 has been to expedite the release of other data products. We tentatively plan to release them 6 to 24 months earlier than for 1980 and that, of course, depends on the product.

We are proposing that computer summary tapes, printed records and microfiche will be the primary means for distributing 1990 census data as they were for 1980. But in addition, we will make limited use of three new dissemination media for 1990: floppy diskettes, laser disks and on-line systems.

We are proposing a number of changes in the format and sequencing of 1990 data products to help us meet our goal of providing quality products and rapidly.

Fifth, the family of computers. At the hearing on March 12th, I reported we had received a protest and an agency appeal to the family contract and that the Board of Contract Appeals enjoined us from proceeding with the contract. I am pleased now to report that shortly thereafter we reached an agreement with protesting companies and the family contract is back on schedule. We expect to award the family contract this month and to carry through with our dress rehearsal automation plans thereafter.

Mr. Chairman, that concludes my oral statement. If I might have a minute, though, I would like to respond to several things mentioned by the previous testifiers.

One, the point was made, and I will paraphrase, if the name and address on a 1990 census questionnaire were in the data file, that could be a confidentiality concern. This does not happen. It is not an "if" sort of thing. The reason is because both the name and address are not included in the filming process of the questionnaire, which happens quite early. It is about the first thing that happens in a major way to disassociate names and addresses from the answers on the questionnaire, so that is a point of clarification.

Here is another. There is no jailing when it comes to someone who doesn't fill out a questionnaire or fills it out incompletely or

anything else. We do have the legal statute to prosecute someone and to fine someone, to have that individual subject to fine. I know of no such instance and I ask any of my colleagues, do you know of any? So there is none there. And when you think about it, if there is anything that the Census Bureau needs at all, it is public cooperation. How in the world are we going to count approximately a quarter of a billion people unless we have that cooperation? So what would that suggest to you about how we treat those that we send a questionnaire to, those whose cooperation we vitally need?

Thirdly, the alleged Census Bureau official who has said that we need testing and there is not enough money for it. Well, we don't know who that individual is of approximately 8,600 people in the Census Bureau. So we don't know if that individual is in a position to really know, be familiar with the testing. Apparently not, because a lot of testing has been done.

You were urged to get involved and we welcome your involvement, of course, as always. But we have done testing and we will supply you a record of that. It is thorough, and it is not a one-shot kind of testing.

A fourth point: there was the request that you—you the Committees—need to get documentation of our security procedures. The documentation of our security procedures is already available. It is thorough. And we will send you an update on that because that is the proper thing to do on this issue.

Finally, we welcome anybody who is inquiring about confidentiality. It is obviously important, protection of confidential information and privacy.

It is in our mission statement that we "invite scrutiny." Those who know the Federal agencies would perhaps be hard put to look at another one that has more scrutiny than the Census Bureau. That does not bother us. But we would like it to be factual when our procedures are described.

Here is why confidentiality is such an issue and what we do to protect it. One, as of course has been mentioned, we are legally mandated to protect confidentiality. But beyond that, it is part of the history of the Census Bureau. So the people are hired with that expectation. They are expected to follow it. They take an oath to follow it and they do follow it.

Beyond that, it is in our self-interest. If there could be a book put out on breaches of confidentiality by the Census Bureau, do you think it would not have been done by now, that there might not be a market for that, that there might not be a lot of stories and hearings regarding such breaches? So it is in our self-interest and we know that.

Finally, it is the most shared value that binds the Census Bureau together. There is nothing more important. People come there, they stay there, they work there and they work well there, because they believe in it and they are out to protect it. When Mr. Berman says I know that confidentiality to the Census Bureau is very important, or they are worried about it, as Mr. Burnham said, we are not worried about it, we are continually concerned about it. We value it. We prize it. We work for it. And Mr. Berman's statement vastly understates that.

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We are more concerned about it than any other Government agency. We welcome your concerns about it. But it isn't the ACLU. It isn't OMB. They all share our concerns, but the Census Bureau is day by day, minute by minute, household by household, decennial to decennial.

Thank you for your indulgence.

Mr. DYMALLY. You will note Mr. Berman has been very careful to preface his remarks with the observation that the Census Bureau was very concerned about confidentiality. They were very dedicated people but there have been at least two incidents after the world—or during the wars where there were certain kinds of leaks.

Do you dispute that or you don't want to get into that?

Dr. KEANE. Pardon?

Mr. DYMALLY. Do you dispute that statement that there may have been two incidents?

Dr. KEANE. It is not quite as clear as presented, but, after all, that is quite a while ago, but we would welcome the opportunity with your concurrence to submit a reaction to the statements made. May we do that?

Mr. DYMALLY. Indeed. Very much.

Let me just get into the questionnaire. Do you have a copy of this before you?

Dr. KEANE. I can't read it from here. What is it, Mr. Chairman?

Mr. DYMALLY. I just let out a company secret. It has not been released yet. [Laughter.]

Dr. KEANE. I am glad I don't have a copy in view of the discussion that has just gone on. [Laughter.]

Mr. DYMALLY. In 1980, you had on your questionnaire, marriage and fertility. In your proposed questions for 1990, you dropped marriage and you kept fertility. What is the fertility and why?

Dr. KEANE. Fertility—you better check me, colleagues. In fact, I think I will ask to be sure. I want to be technically correct.

This is Paula Schneider, Chief of our Population Division.

Mr. DYMALLY. That is just what I anticipated. Your inability to give me an immediate answer as you always do is in my judgment telegraphing the problem that that question poses. Here I am, these bureaucrats ask me about my fertility. Is it wheat fertility on the farm or my personal fertility?

Ms. SCHNEIDER. That is not the way the question is phrased. That is the topic, title. Actually, the question is the one that was referred to earlier, about how many children for women, how many children has a woman ever born and it is a listing from zero up—I forget the upper limit.

Mr. DYMALLY. Twenty. But is this term "fertility" just a classification of the question or is the word "fertility" in the question?

Ms. SCHNEIDER. The word "fertility" is not on the questionnaire. It is just a title.

Mr. DYMALLY. How is the question posed to bring out that answer?

Ms. SCHNEIDER. Specifically it says, if this is a women, how many children has she ever born, and I believe it says excluding stillbirths. How many children has this woman ever had.

Mr. DYMALLY. I would like to see that specific question before I pursue it. The question suggested to me there would be some opposition to it and that it may get into some personal family history. The way you pose it is somewhat different. I would like to see the question in its raw form so we could pursue it.

Would you please respond?

Dr. KEANE. This is Art Young, Chief of the Housing Division. And while he is coming up, I will introduce Nampio McKenney, who is Assistant Chief of the Population Division, on my far right.

Mr. DYMALLY. Number 20 reads, "How many babies has she ever had, not counting stillbirths. Okay. It poses a different question.

Why did you drop marriage and why did you keep this other one?

Ms. SCHNEIDER. The question on marital history asked basically three parts in the 1980 and earlier censuses. It asked when was this person first married, from which we could derive the age at which they were first married, and if the first marriage had ended, did it end because of widowhood or divorce. The reason we dropped it, although it was a topic many people wanted on the census, we could not find a need. If I can use some of the terminology used earlier, that it was marginal enough we felt we would not burden the public with asking it. There were not legislative requirements, there were no program mandates.

Mr. DYMALLY. Mrs. Morella has, I think, some more questions of Mr. Keane.

Mrs. MORELLA. I have a series of questions. Nice to see you here. I actually asked a few questions of the ACLU representatives that really belonged to you. One had to do with country of origin versus the ancestry; are you going to accommodate that on the questionnaire, to say ancestry instead of country of origin? Maybe citizenship can handle country of origin.

Ms. SCHNEIDER. Actually, the controversy was whether we would ask ancestry or country of birth of parents. In fact, at this point our proposal is to include the question on ancestry. We also plan to include at this point a question on the individual's country or state of birth.

Mrs. MORELLA. So you will have both so that will bless the ethnic groups that would like to know what the backgrounds are.

I wanted to ask you about congregate housing and your determining that housing must be congregate because there are meals that are part of what is paid. I am curious about why it is included, not that I am against it, and how that is a good definition of congregate housing.

Dr. KEANE. I will ask the Chief of our Housing Division to answer that.

Mr. YOUNG. It is not the best definition that you can come up with but it is a practical definition that can be used in a decennial census. At our local public meetings one of the themes that we kept hearing again and again was please help us identify some of the new ways that the elderly are housed, these life/care arrangements, which was not quite owning and not quite renting, they are something in between, that is meals are provided, health care is provided, sometimes also transportation and recreation. The housing looks very much like regular apartment houses, townhouses or

individual single-family homes, but the difference is that there are nonhousing facilities included for which these people pay a fee.

HUD uses our rent data in their fair market rent program. When you include clusters of housing of this type where there will be high rent charges because of the extra services, the one way that you can identify the clusters quickly is to ask "are meals included in the rent?" Along with improving the rent data we will get some identification of this new style of housing.

In our National Content Test we estimated that just slightly less than 1 percent of rental housing had meals included in the rent. But our best estimate is that this was practically zero at 1980. It is a growing form of housing as the elderly population increases as a percent of all our housing, and that is why data users feel it is important that we make a start at getting some base data to see what the trends are and to look into the future.

It is one of these things that we look ahead to 2000, 2010, and try and establish when this started.

Mrs. MORELLA. Indeed, I think it is important to look at congregate housing, but to use as the measure exclusively—whether meals are provided in the rent—might include a boardinghouse or something like that and not touch on whether or not there is the health care which is an interesting component of it, an exciting one.

Mr. YOUNG. The thing we will be able to do, because we know the age of the people residing there from the population side, we will be able to separate the boardinghouse, say that has workers, the Home for Working Girls, from the elderly.

Mrs. MORELLA. Or working boys.

Mr. YOUNG. Yes.

Mrs. MORELLA. I had a few other questions I wanted to ask. I am glad you are doing something about disability. I don't know how you are handling it but I remember in our Select Committee on Aging there was a discussion about the Older Americans Act being reauthorized and there was a question regarding not knowing how many elderly there are who are disabled. That has been a part of the population that is regarded just as elderly and that is all the census demonstrates but not what kind of disability you might have, which has such an impact.

Will the questionnaire reflect that? I know you say something about adding disability. Are you going to be sophisticated enough to get the right answers and to ask the right questions?

Dr. KEANE. We will ask about personal care ability as far as disability impaired and also about work impaired disability.

Mrs. MORELLA. Say it again. Work impaired disability.

Dr. KEANE. Disability that would impair one from working, the kinds of disabilities that would impair one from taking care of himself or herself.

Mrs. MORELLA. So there may be——

Dr. KEANE. There is not just one category of disability.

Mrs. MORELLA. But not many, so there are going to be some who are going to fall through the cracks. Have you looked to a number of organizations that are involved?

Dr. KEANE. Yes, it goes through the usual thorough long searching process of topic selection as well as question working and, of course, our ongoing testing program.

Mrs. MORELLA. Again I would like to see those and run them by some of the groups that are involved with the handicapped and with the aging.

Also the question with regard to income, can those figures be arrived at in some other way or is it absolutely needed. Must you ask? I am not saying you shouldn't ask it. I am just prefacing. Can you get these figures in another way or is the census the only way we get income information?

Dr. KEANE. The census is really the only vehicle for small area data and income is so important. We ask, of course, a total question on income, because some just prefer to fill that out and not get into the categories, but then we need the detailed income because of program use on various kinds of income.

And one helps the other; that is, to ask just total income without the detail would not satisfy many program needs. On the other hand, to ask program detail without asking a question about what is your total income, then those who refuse or can't tell you because, they may just not know, wouldn't give any answer. As someone who is out on a lot of interviews, I have run into that firsthand as I observe.

We would hurt the respondent by not giving the individual a chance to give total income. That is the reason for the format the way it is proposed.

Mrs. MORELLA. Isn't that the area where people are least likely to respond? Do you find that to be a problem?

Dr. KEANE. Is that the highest nonresponse?

Ms. SCHNEIDER. It is one of the highest. We have several types of income categories and I think part of it is unwillingness to answer and part of it is because people don't know some of the types and that is why we do have the total income question for those who cannot give us the detail.

Mrs. MORELLA. So you feel that can compensate somewhat because there is no way you are going to get more specific, more answers?

Ms. SCHNEIDER. Right.

Mrs. MORELLA. You don't see any way to do that, is that it?

Okay. Mr. Chairman, could I ask a couple really brief questions?

Mr. DYMALLY. Of course.

Mrs. MORELLA. Back to the ACLU testimony. You said you are going to show us the documentation of the security procedures. Does this mean that you have enhanced the security safeguards since the last census? Is this going to be something new we are going to see? Or is it a recapitulation of what you have done before? Technology has advanced. We now have the whole computer security problem. Does this mean you have streamlined?

Dr. KEANE. It is an update responding to the new environment in which we find ourselves. Responding to it organizationally, financially, and methodologically and technologically, too. So, in other words, we have a separate division for personal security and a separate division for data security rather than having both in one division in the organization of the Census Bureau, and this is one ex-

ample of the response in priority we have given to data security, confidentiality issues, et cetera.

Mrs. MORELLA. I guess we need to look at what you did before and what you are doing now in order to compare how advanced we have become in reflecting that great concern.

Another question that I asked before, too, is the fact that having experienced lower than expected responses in some of the 1990 test censuses, reduced 5 percent was the figure I have been told, what have you done to streamline the questionnaire of 1990 to reduce the burden on the general public?

Dr. KEANE. There is no evidence that streamlining the questionnaire would be helpful. We have done other things like the community awareness program and special projects with schools being planned now to compensate for that. But there is no evidence that streamlining the questionnaire—I don't say it wouldn't but we haven't been able to find evidence that it would.

Mrs. MORELLA. So you are trying to do an education program then?

Dr. KEANE. Yes.

Mrs. MORELLA. What are you educating them to, the fact that it is necessary that we need these figures?

Dr. KEANE. Since we count everybody, we try to educate everybody. We are putting special effort on the most challenging segments in the society to count, such as blacks, young male blacks in central cities, Asian-Pacific Islanders, in certain areas Vietnamese are relatively new developments since the 1980 census, Native Americans and Alaskans, both on and off reservations. We have formal advisory committees. And, of course, Hispanics. Lots of work done on an ongoing basis with all the groups.

But there is not evidence—it doesn't seem to us that the reason that our estimate has dropped from the 83½ percent on the mail return in 1980 to our estimate for 1990 of 78 percent—is not tied to the questionnaire length.

Mrs. MORELLA. Do you think it is just tied to apathy or people don't want to get involved?

Dr. KEANE. Apathy, but I would suggest also the junk communications, as I call them, that are up quite a bit.

Mrs. MORELLA. You mean you are not offering them a weekend away at a resort if they fill out the questionnaire.

Dr. KEANE. Even if we were it would be hard to find it in the mailbox. When I said junk communications, I mean as opposed to mail because we have phone and sometimes door to door, so you have at least the first two sectors which are prominent, which confuse people on the one hand, cause apathy on another, and make it more difficult.

So we have to make special efforts, which we are, in designing the envelope so that it will have something distinctively appealing about it to give us the best opportunity for it to be opened and for people then to cooperate and complete the questionnaire.

Mrs. MORELLA. Not much left when you realize we get mail that looks like a Mailgram, something else that looks like it's a Federal check. All of these inducements have already been used. I don't know what you have got left but one of the things I learned was that this junk mail is evidently not only self-supporting but helps

to subsidize the Postal System. I found that surprising because I came in ready to try to get rid of junk mail, only to find out we are really depending on using it financially.

Thank you very much, Mr. Chairman.

Mr. DYMALLY. Why don't we put all the questionnaires on a 4 by 5 card, nice little IBM card in the mail, red, white and blue, Statute of Liberty, eagle on it?

Dr. KEANE. That is what they are all doing now. That is our problem. Liberty Weekend put out the word.

Mr. DYMALLY. I believe, and, Mr. Berman, correct me if I am wrong, that the Buckley Act was the result of liberals and conservatives concerned about the whole question of privacy. What if you are faced with a revolt as they are experiencing in Germany, some guy is looking for a cause, he starts this one, too many questions on the questionnaire? Do you have any contingency plan to deal with that?

Dr. KEANE. Contingency planning is part of the strategic planning process of the Census Bureau and also part of the program area.

The first thing to do is to set our early warning system in such a way as to pick up any sense, and that is what we use, for instance, the test censuses for. A lot of other reasons, too, important reasons. But we would pick up anything like that.

We have our advisory committee structure. We watch the foreign countries a lot closer than anybody else does, by the way, the West Germany situation in particular, the Netherlands, Finland. I was on call to testify at the Bundestag for two years on the national value of a census growing out of a Wiesbaden meeting I attended with the census directors of Europe. So we are in touch with the censuses there.

And that is quite a different circumstance going on in West Germany. It comes across as, well, it is happening there and it is likely to happen here. The states are very much involved. The Green Party is very much involved. The Pershing missiles launched—no pun intended—launched the whole controversy, so it is a much more complicated issue than was explained to you.

Mr. DYMALLY. This is a Presidential year. Candidates are looking for an issue. Sit down and don't be counted.

Let me advise you that we are going to send you, as we usually do, a list of questions because time does not permit, and I am wondering if your staff and our staff can work together on a session, open but sort of a sit-down informal session, where we could talk about some of the things without having proper transcript, talk to each other back and forth, half-a-day or an all-day session. Can we work it out?

Dr. KEANE. Of course. I don't plan any trips to Russia.

Mr. DYMALLY. Mrs. Morella.

Mrs. MORELLA. One of the questions I would like you to answer, and maybe you can do it as Chairman Dymally had suggested, but I discovered that there had been a 1985 streamlined form developed by GAO that you did not use. I was curious about why you did not. Maybe you want to address it in writing or maybe you want to comment on it now. I didn't realize it before.

Dr. KEANE. Ms. Schneider.

Ms. SCHNEIDER. I am not sure I know what you are referring to. Is that the one that was connected with deletion of the vast majority of the housing items?

Mrs. MORELLA. I am not really sure. But I heard that GAO developed this streamlined form and the Bureau decided not to use it.

Dr. KEANE. Why don't we respond in writing.

Mrs. MORELLA. I just want to pose it.

Thank you very much, Mr. Chairman.

Mr. DYMALLY. Again, are you familiar with a study done by Mr. Cox of the Mathematical Division of your Bureau?

Dr. KEANE. No, I am not.

Mr. DYMALLY. You might want to mark off on the file and review it. I think it might be relevant to some testimony given here by Mr. Berman, so we will hold that and ask you about that later on.

Dr. KEANE. All right. Would you like me to respond in writing?

Mr. DYMALLY. Yes. And when we have our little session, little personal session.

Listen. I understand, in closing, that there are penalties for people who deliberately refuse to answer the question or distort the answers to a series of questions. I understand there is a penalty. I would like you to check the statute and see what sort of penalty there is.

And we want to talk about protection. How do we, how does the Congress and the public, get some further assurance? I know every time you speak you give that sort of assurance, your commitment to it and the Bureau's commitment to it, but it would be nice to see something that you have, what your internal memos, what your regulations are. Is there something in writing about the whole question of confidentiality?

Dr. KEANE. We will submit it for the record.

Mr. DYMALLY. So we could have it for the record.

Mrs. Morella?

Thank you very much.

Let us take Mr. McClain and Dr. Farstrup together.

Mr. McClain.

TESTIMONY OF JOHN A. McCLAIN, DIRECTOR, METROPOLITAN AND INFORMATION RESOURCES, WASHINGTON COUNCIL OF GOVERNMENTS, REPRESENTING THE AMERICAN PLANNING ASSOCIATION;[5] AND ALAN E. FARSTRUP, PH.D., INTERNATIONAL READING ASSOCIATION,[6] ACCOMPANIED BY RICHARD LONG, PH.D.

Mr. MCCLAIN. Thank you, Mr. Chairman, Congresswoman Morella.

My name is John McClain. I am Director of Metropolitan Development and Information Resources for the Metropolitan Washington Council of Governments [GOG].

My organization is a voluntary organization of all the local governments making up Metropolitan Washington including the District of Columbia and the suburbs of Maryland and Virginia.

[5] See p. 185 for Mr. McClain's prepared statement.
[6] See p. 209 for Dr. Farstrup's prepared statement.

In my capacity with COG, I am responsible for directing and coordinating the planning programs in the metropolitan area and am intimately familiar and aware of uses of census data within this region. One of the things that we did in our capacity of State Data Center for the District of Columbia was to set up all the summary tape files for the 1980 census in a computer network that was accessible to the staffs of local governments in the Washington area and those tapes were extensively accessed through our computer system.

I am a member of the American Planning Association and past president of its local chapter, the National Capital Area Chapter, and I am also a member of the Arlington County Planning Commission.

I am testifying today on behalf of the American Planning Association. I am not going to read from the statement but I would like to summarize the main points.

Mr. DYMALLY. Your entire statement and those of the other witnesses will be entered into the record.

Mr. MCCLAIN. Thank you.

APA is an organization of 21,000 members from across the country. Its main purpose is to advance the art and science of planning with the improved development of the Nation, its regions, its States and its communities.

In speaking for APA I want to focus on the eight housing questions that have come into issue as perhaps not being asked on the 100 percent count, those housing questions being: number of units, number of rooms in unit, plumbing facilities, value of home and rent value.

Since many community decisions affecting their economic and social well-being are based on neighborhood housing data, we felt it was important to survey our membership to find out the kinds of uses that they have been putting this information to. I would like to list five major points regarding the survey results.

First, almost all of our members consider the possible elimination of this data to be a mistake since they and their communities use the data to develop and carry out local housing programs and strategies. Some specific applications include the use of this data for local rental housing administration and enforcement, and basis for rent administration fee protests and for specific local planning and zoning programs.

As one of our members said, and I quote, "The block level data, the 100 percent count provides the type of geographic detail necessary to conduct studies and programs at the neighborhood level."

Second point: The 100 percent block data on housing are used for many non-housing programs. We use them within this Washington area for laying out transit routes and bus routes, and for general transportation planning. Local governments use them for capital improvement programs to develop plans for construction of schools, libraries, and so forth.

Third point: They are extensively used by the private sector to target investments, carry out market studies and to make business location decisions.

Fourth: We asked our members what they would do if this were a sample question rather than a 100 percent count question. Our

members responded that the 100 percent count becomes the basis for their programs and provides the framework for planning targeted to the neighborhood level. This requires block data for developing and carrying out those programs.

Fifth point: We asked our membership about alternative sources of this information. I would like to quote one of our members. "We simply do not have the local resources to collect the data, particularly in light of elimination of general revenue sharing funds and continuing cutbacks in Community Development Block Grant funds."

If the data are not collected at a 100 percent count, local governments will be faced with two choices. They will either spend scarce local program dollars in order to collect the same information, or, what is more likely, they will base important resource allocation and planning decisions on outdated and inadequate information.

Our final point I want to make is to indicate that we received a letter on May 11 from Dr. Keane of the Bureau of the Census who thanked APA for its expression of concern about the content of the 1990 census housing questions. He has recommended that because those housing questions are crucial, that they be included at the 100 percent level. We thank and congratulate him and his staff for their thorough and open review of the matter and we applaud his recommendation that these questions be included in the 1990 census.

We hope that Congress will provide the necessary support to continue the collection and analysis of data that are so essential to planning for our community's social and economic well-being. Thank you very much.

Mr. DYMALLY. Thank you very much indeed.

Mr. Farstrup.

Dr. FARSTRUP. Mr. Chairman, members of the Subcommittees, I would like to thank you for the opportunity to testify.

My name is Alan Farstrup, and I am the Director of Research and Development for the International Reading Association. We are a professional society engaged in the work of literacy and we are very deeply concerned about matters of reading education, both for children, young people and adults, and as such, it is our pleasure to provide you with some feedback on a series of questions concerning the content and comprehensibility of the proposed census forms that I was asked to review.

Before I begin I would like to give you a little bit of background about the Association in the sense that we represent over 73,000 members, the vast majority of whom are reading teachers and specialists within the United States. And these people are in daily contact with members of our society who cannot read. And it is from that perspective that I wish to bring my remarks today since it is a very important aspect of the census data that it is used as a factor in the identification of populations that have special needs in the educational programs of this country.

In fact, in the Chapter 1 compensatory education programs it is my understanding that census data are used to identify areas and populations that qualify for compensatory services. And it is of considerable concern to the Association that those very people who are impacted by the kinds of services that are directed through the use

of census data may, in fact, not be able to read and respond to the census forms.

I was asked to respond essentially to four different areas of concern. The first, what sort of educational level does a person need in order to respond to the pilot 1990 or alternative census questionnaires. Secondly, can the layout of the proposed alternative questionnaires be improved to enhance their comprehensibility in any way? Third, are the instructions in the alternative questionnaires and in the previous forms I was able to examine clear to the average reader? And, finally, can the questions themselves be stated more simply?

In order to try to answer the question; that is, the question dealing with the level of education necessary to read and respond to the proposed forms, the alternate form, the strategy that I took was to take a look at the kind of vocabularies that were used. In reading research there is a tradition of using readability which are dependent upon a number of factors, but most importantly you need to have connected texts, communication of connected text to evaluate. By their very nature these questionnaires are fragmentary in terms of running text involved, so the strategy I took was to examine the kinds of vocabulary included in the forms and compare it to some rather extensive materials that take a look at how frequently words appear in written text in our country.

Doing that revealed something rather interesting, and I think it reflects the kind of care that the Census Bureau has taken in the design of these forms; that is, the average person who has successfully completed public school ought to be able to read these forms and comprehend the information content in terms of the vocabulary and the language of the forms. When you take a look at the frequency of words that appear in the forms and when those words are typically introduced in school, you find that by the fifth grade or so most children will have been exposed to the words that are being used in most cases in the census form; which is another way of saying the average person ought to be able to read these forms.

But of great concern to me and to the Association is the fact that large numbers of people don't achieve at the fifth grade level, are in fact marginal readers or non-readers and won't be able to respond to these forms.

I was pleased to hear Mr. Keane's comments today about the many procedures that are used to follow up with interviews: telephone contacts, drop-in aid centers for people who can't complete these forms. I think this is commendable. I think the word ought to be gotten out very effectively that this exists.

But it doesn't really solve the problem of the marginal reader who may be unwilling to reveal the fact that they can't read. So I want to reinforce the point that, while the average person can read these forms, we still have a serious problem with those who are non-readers and there are right now millions of adults who cannot read but the Nation's data base on the literacy level of our country is incomplete. We don't have accurate information about how many people in fact can't read at various levels.

Mr. DYMALLY. I don't want to interrupt but you raised a very important point and I don't want to have it go by. What suggestions do you have to the Bureau for the people who find themselves in

the category of being prominent in neighborhoods with their households but don't want to reveal the fact they can't read? How do we deal with that?

Dr. FARSTRUP. If I had the complete answer to that I suspect I would be elsewhere, on a sunny beach somewhere. I would suggest that the interview sessions and some kind of special sampling process whereby high risk populations are identified and systematically sampled using the best of statistical sampling techniques to try to then project literacy levels.

I would suggest the "National Assessment of Educational Progress: Profiles of America's Young Adults" do provide a pretty good model for how that might be done. Interestingly enough, that data that was released last fall reveals the highest risk populations in our society are the same kinds of populations, that is, the minority populations, the non-English-speaking population, young black men in the inner cities, these kinds of populations are those who are most likely to experience literacy problems and they are also the ones who apparently are contributing to the expected decrease in response rate that was discussed earlier today.

The second question that I was asked to address was the appropriateness of the layout and design of the questionnaire in relationship to its comprehensibility, and this is a very difficult question to address because the designers of the form are faced with a very difficult problem. They have to collect accurate and correct information in a way that is efficient for tabulation and aggregation while packing as much into as small a space as possible.

The language that is used for the questions I think is about as good as it can be. There is always room for amplification and rewording. The cover page of the proposed alternate form that I examined uses a very good question and answer format as a way of leading the respondent to the questions that are within. I think there is room for fine tuning of that language and what I heard this morning was that that fine tuning will, in fact, occur; and I would hope my detailed comments would be helpful in that regard.

The format itself is a multiple column format that requires the person to comprehend that you are working with a grid, with questions down the left and individual data across the top. This kind of format is very easy for someone who is used to working with matrixes and data tables, but it may not be very intuitive for someone who sits down with the form for the first time.

And quite frankly, I think all of us have to spend a few minutes scanning the form and figuring out just how things are arranged before we can effectively respond to it.

I hate to be a Monday morning quarterback but I think the need to compress and condense the collection form conflicts in many ways with the need for comprehensibility. If I had my druthers some of these things would be opened up and you would have separate pages for each individual for whom data was being collected, but I also recognize the volume of paper and space that would be involved with that. Certainly the addition of more pages with more white space, more imaginative use of graphics would help.

A third question addresses the matter of instructions and I believe the instructions are handled rather well given the minimal instructions that exist. The main suggestion I would offer is that—

there are a couple of them: One is that it helps the respondent to have a sense of where the form is going; that is, to have an overview of how the form is organized. And the way the instructions are now laid out, they are sequential and stepwise and quite logical but you don't quite know where you are going with it, and I would suggest some overview on the organization of the data collection would be very helpful, especially to the marginal reader.

Also I noticed—and this is a technical issue—their quite effective use of color shading to differentiate questions from response areas. This kind of technique would be useful also to differentiate the times that are instructions from those that are actual questions.

And there is some confusion in some places where you will see shading, highlighting in an instructional area and shading which highlights a question and that could cause some confusion in the mind of a reader.

I believe that with the addition of some sort of overview instructions that would give a frame of reference to the reader you would have a higher likelihood of the marginal reader being able to deal with this.

The fourth area of concern is that of the clarity of the questions themselves and as I examined these, as I said before, they really are quite simply stated. I think the average person who has been a successful participant in schooling and learning to read would be able to deal with those. The major problem that I see with the form, and I have no neat answers for it, is its visual complexity. Your eyes cross when you open those pages and it takes a few minutes to sit and scan it and get a sense of how it is organized for you to be willing to go ahead and try to answer the questions, which gets to me to the question of motivation.

If you are well motivated you can do this form. If you are not, the likelihood of someone, particularly a marginal reader, skimming through and bubbling in answers just to get done with it is quite high. We see this all the time in educational testing, and I would expect that the Census Bureau has statistical techniques for looking at response patterns and weeding out forms that are clearly responded to at random.

But that still leaves the problem of how do we get information from those segments of the population we need to know about most so we can direct Federal, State and local resources to their needs.

I have attempted to at least speak to the four questions that were raised to me. I would like to emphasize that the need for gathering more information about literary rates in our country, whether it is done within this form or as a spin-off study, is a separate question but it is critically important that we know since the debate has mentioned from, in conservative figures, below 10 percent of our population being illiterate to wildly pessimistic figures of well in excess of 25 percent. We simply don't have enough information in this area. Since education is such a cornerstone of our democracy, I think we need it.

I would like to thank you for the opportunity to testify today. I would be happy to answer any questions and provide any information at a later time that I can't provide today.

Thank you.

Senator PRYOR [presiding]. Thank you, Dr. Farstrup.

I have just gotten in the hearing late. Mr. McClain, have you already made your statement?

Mr. MCCLAIN. Yes, I have.

Senator PRYOR. In a non-English proficient household, who would read and answer the questionnaire? They don't speak English.

Dr. FARSTRUP. There is a proviso on the form in Spanish—which is the major tongue but not the only one by any means—that gives instructions to the respondent as to how it should be handled. I would assume the Census Bureau has set up information networks people can contact to receive help. Whether they do or not is another matter. I don't have any information.

Senator PRYOR. Would answering all the questions and reading all the answers give us any indication as to the literacy rate in the country? It probably would not answer that question, or would it?

Dr. FARSTRUP. The technique that has been used has been to relate the level of educational attainment and grade level completion to a literacy notion and that is a very indirect measure at best and it may not terribly accurate. I think the kind of approach that the National Assessment has used with a few simple performance type of questions probably yields much more accurate information than the kinds of questions, very limited educational questions that are in the survey form now.

Senator PRYOR. Was the International Reading Association contacted by the Census Bureau to give advice on how to make the form clearer or simpler to understand?

Dr. FARSTRUP. I am not aware of any contact that was made to our national headquarters. It may be that some of our members have been involved as consultants, but I am not familiar with the details of that.

Senator PRYOR. I apologize once again for getting in late, but do you have any suggestions that we might follow in making this more readable and easier to comprehend? Do you have those suggestions?

Dr. FARSTRUP. I think the effort to simplify the language has gained us a lot in comprehensibility and needs to be continued. As has been the case with other agencies, the Association has been contacted on matters of the document comprehensibility, for example. The Federal Emergency Management Association has worked with us on this and I think it is a matter for a working session and I am quite confident that the Census Bureau has attended to these matters. Their testimony today didn't specifically reference comprehensibility but we could be happy to assist in any way that we could.

Senator PRYOR. I understand that you looked at an alternative form.

Dr. FARSTRUP. Yes.

Senator PRYOR. How does that form compare with the 1980 form?

Dr. FARSTRUP. The content of the form is quite similar. There is a change in the cover page in that the alternative form goes to a question and answer kind of format to give the respondent an orientation to what is to follow, and I think that is a very good strategy. The instruction, interestingly enough, from my very quick review, the 1980 census form has a very good set of instructions about how to physically write in the answers and to handle the

questionnaire and that has not been carried over to the alternative form that I examined. So I think while there have been some good elements added, particularly the introductory section, some of the instructions have been cut back in order to offer the space to do that. Again it looks like a series of compromises.

Senator PRYOR. I want to thank you on behalf of the Subcommittees today because you have performed a real service in your testimony this morning. You have given us something to think about as we really begin now getting down to the serious aspects of a questionnaire, what that questionnaire should be comprised of, and so, we are very indebted to the both of you. We thank you.

Dr. FARSTRUP. Thank you.

Senator PRYOR. The hearing will stand adjourned.

[Whereupon, at 11:30 a.m., the hearing was adjourned.]

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

Statement of

WENDY L. GRAMM

ADMINISTRATOR FOR INFORMATION AND REGULATORY AFFAIRS

OFFICE OF MANAGEMENT AND BUDGET

before the

SENATE SUBCOMMITTEE ON FEDERAL SERVICES, POST OFFICE, AND CIVIL SERVICE

and the

HOUSE SUBCOMMITTEE ON CENSUS AND POPULATION

MAY 14, 1987

Mr. Chairman and members of the Senate Subcommittee on Federal Services, Post Office, and Civil Service and the House Subcommittee on Census and Population: I am happy to have this opportunity to discuss the role of the Office of Management and Budget (OMB) in planning the 1990 decennial census and developing the list of subjects for the census questionnaire.

OMB's role in the planning of the decennial census derives from its budget review responsibilities and from its responsibilities under the Paperwork Reduction Act of 1980. Under the latter, OMB is responsible for statistical policy and coordination and for review of Federal information collections.

Section 3504(d) of the Paperwork Reduction Act (44 USC 3504(d)) assigns OMB specific statistical policy and coordination functions that include developing and reviewing long-range plans for the improved coordination and performance of Federal statistical programs and activities, and, through budget review and other means, coordinating the functions of the Federal Government with respect to gathering, interpreting, and disseminating statistics and statistical information.

As part of carrying out these statistical policy and coordination responsibilities, OMB organized and has been chairing the Federal Agency Council for the 1990 Census. OMB established this body to assist in identifying the requirements of Federal agencies for data from the 1990 Census and in determining the priorities that should be given to the numerous demands of Federal agencies to have questions included in the

census questionnaires. The Federal Agency Council, whose organization and processes I will describe in a moment, played a significant role in developing the list of questions that were tested in the 1986 National Content Test for the 1990 Census.

The Paperwork Reduction Act also gives OMB responsibility for reviewing and approving or disapproving collections of information by Federal agencies. The Act requires OMB to assure that the information to be collected has practical utility and does not duplicate other available information, and that the burden on the public is no greater than necessary. In fulfillment of this responsibility, OMB has been reviewing the content tests, test censuses, and other surveys relating to the 1990 Census, and we will review the final census forms. Since January 1, 1986, OMB has reviewed and approved 25 submissions relating to different aspects of the planning of the 1990 census. Six additional submissions are currently under review. (A list of the submissions is in Attachment 1.)

Federal Agency Council on the 1990 Census

In August 1984, OMB wrote to the Senior Officials for Information Resources Management in the Federal Government inviting them to nominate representatives to a Federal Agency Council for the 1990 Census. We informed the Senior Officials that "the purpose of the Federal Agency Council is to advise OMB on the requirements of Executive Departments and Agencies for data from the 1990 census." We explained that "since the number of questions that can be asked in the decennial census must be limited, it is necessary to coordinate requirements carefully and set priorities for the Executive Branch." We also asked each agency to report its uses of 1980 census data, including any statutory requirements for such uses, and indicate any changes in its requirements for 1990.

Twenty-one Executive Departments and Agencies initially designated a representative to the Federal Agency Council and one additional agency joined the Council later. (The agencies represented are listed in Attachment 2.)

The Council's first order of business was to develop recommendations for the 1986 National Content Test. The Council considered a list of possible items for testing developed from the agency reports to OMB of their data requirements, as well as a set of recommendations by the Census Bureau based on the reports of ten Interagency Working Groups that Census had organized. The Federal Agency Council considered each item separately and voted on whether it should be recommended for inclusion in the 1986 tests.

The proposed questionnaires for the 1986 National Content Test were submitted to OMB in August 1985 for clearance under the Paperwork Reduction Act. OMB sent copies of these forms to the Federal Agency Council members for their review and transmitted oral and written comments and requests for changes to the Bureau of the Census. In response to OMB and agency comments and requests, the Census Bureau made a substantial number of changes in the National Content Test questionnaires and instructions. These changes resolved most of the major issues that had been brought up by other agencies during the OMB clearance process. OMB approved the National Content Test on September 30, 1985, with one substantial condition of clearance. This required the Census Bureau to test an alternative set of disability questions that had been requested by the National Council on the Handicapped.

Since the OMB clearance of the National Content Test, the Federal Agency Council has reviewed the Census Bureau's plans for analyzing the National Content Test and for developing the Dress Rehearsal questionnaires based on the National Content Test results. It has also begun to consider the priorities for processing and releasing different data products from the 1990 Census. Since Federal agencies expect to use 1990 Census data for a variety of administrative purposes, some mandated by law, the timely processing and release of these data is of as great importance as the initial collection.

We believe that the Federal Agency Council has provided a useful mechanism for identifying Federal requirements for census data and for coordinating and assigning priorities to the demands of Federal agencies for space on the census questionnaires. The Council identified a number of topics and questions that, although certain agencies would have liked to include them in the census, were clearly of low priority to the Federal Government. The Council also verified that there is no Federal need for certain questions that have been asked in past censuses -- for example, the number of bathrooms in one's home and whether one's home has air conditioning. The Census Bureau has been asked to exclude these questions from the 1990 census.

The Demand for Census Data

A very large share of the demand for census data comes from Federal agencies. The information that agencies provided to OMB indicate that there are relatively few data that must by law be collected in the census. On the other hand, there are a number of Federal programs that make allocations and distributions based on demographic statistics. In some cases these allocations and distributions require data at a level of geographic detail that can only be derived, or that can most economically be derived, from the census.

Federal agencies are also aware that the census is, for them, a cost-free data collection. Whereas most Federal data collections are sponsored and paid for by the agencies that are the principal users of the data, the decennial census is paid for entirely by funds budgeted to the Bureau of the Census. Since census data are essentially free goods for other agencies, it is not surprising that the demand is large.

On the other hand, the decennial census is an information program of limited capacity. There are cost constraints that cannot be exceeded in the current budget environment. There are limits to the burden that can be placed on respondents. There are constraints on the kinds of questions that can be asked without intruding on people's privacy and making them less willing to cooperate in the census. There are limits to the Census Bureau's capacity to process and publish census data within a time frame that makes the data useful, without substantially increasing the cost. The demands of Federal agencies and others for census data must be balanced against these constraints and limitations.

OMB Review of 1990 Census Questionnaires

OMB will be keeping in mind this need to balance as we review the questionnaires for the 1988 Census Dress Rehearsal and for the 1990 Census itself. Although OMB chaired the Federal Agency Council which recommended questions for testing and for inclusion in the census questionnaires, we have not yet seen or analyzed the whole collection together. We will have that opportunity shortly, when we receive for review under the Paperwork Reduction Act the questionnaires for the 1988 Dress Rehearsal, which should in principle be identical, or very close, to the final 1990 census forms. This is therefore a critical point at which to review and evaluate the size and content of the 1990 census questionnaires.

As we are required to do by the Paperwork Reduction Act, OMB will review the Census Bureau's documentation of its burden estimates for the 1990 Census -- both the per-household and the total burden -- and we will review the justification for each question on the short and long forms to assure that it meets the practical utility criterion defined in OMB's paperwork regulation (5CFR 1320.7(q)). In evaluating practical utility, we will ask the Bureau of the Census to demonstrate -- citing the results of its pretesting or past census experience -- that each question it proposes to ask is likely to elicit useful data. OMB will also review the proposed data products and schedule for releasing census data. Data have no practical utility unless and until they are published. The utility of census data may diminish sharply if they are not published until mid-decade.

OMB's Level of Participation in 1990 Census Planning As Compared to 1980

I have been asked specifically to comment on the level of OMB participation in 1990 census planning as compared to 1980. In 1980, as in 1970 and 1960, OMB also organized and chaired a Federal Agency Council. The 1980 Council included, in addition to the main body, 10 subcommittees, chaired by OMB, dealing with specialized subject-matter areas: housing, income, occupational classifications, labor statistics, transportation statistics, demographic statistics, race/ethnicity, education, disability, and health.

OMB has done two things for 1990, in connection with the Federal Agency Council, that were not done for 1980. We asked the agencies to prepare documentation of their census data requirements, including the statutory basis for these requirements. We believed that OMB needed such documentation, prepared by the user agencies, to assess the practical utility of all data proposed to be collected in the census. We also, shortly after organizing the Federal Agency Council, conducted a round of bilateral discussions with each of the agencies to clarify the extent and basis of its need for individual census items.

In addition, under a new OMB program of major systems reviews, we are monitoring the Census Bureau's acquisition of data processing equipment to make sure that major milestones are met. This form of OMB oversight did not exist when the 1980 census was being planned.

We also believe that the Paperwork Reduction Act gives OMB a stronger basis for overseeing census planning. The Act gives OMB an explicit mandate to maximize the usefulness of information collected by the Federal Government and to minimize the reporting burden on the public. It also placed the functions of Federal paperwork control, information and information technology management, and statistical policy and coordination together in OMB's Office of Information and Regulatory Affairs. We believe this enables OMB to carry out its oversight functions in a better integrated and more effective manner.

Privacy and Burden

In reviewing the plans for the 1990 Census, OMB will continue to pay very close attention to privacy and burden issues. The Paperwork Reduction Act assigns OMB's Office of Information and Regulatory Affairs broad responsibility for ensuring that Federal agencies collect, maintain, use, and disseminate information in a manner that is consistent with the Privacy Act and other laws relating to confidentiality. Our statistical policy

responsibilties also cause us to pay careful attention to privacy issues in statistical data collections. In the case of statistical programs, respecting personal privacy is not only right but prudent, since the quality of government statistics depends ultimately on the willingness of people to cooperate in government surveys. In all our reviews of information collections under the Paperwork Reduction Act, we give particularly careful scrutiny to questions that could be seen as personal, sensitive, or intrusive. Before approving such questions, OMB requires a strong demonstration both that there is a valid government need for such information and that respondents will be willing to provide the information.

We are similarly concerned with the relationship between the burden of the census questionnaires and the quality and usefulness of the statistics based on the census. The time and effort that people are required to spend on the questionnaires will influence their willingness to respond to the census and to answer questions thoughtfully and accurately.

In closing, I would like to note that the 1986 Amendments to the Paperwork Reduction of 1980 strengthen the provisions of the Act that allow for public participation in the OMB information collection review process. The amendments require that agencies publish certain specific information in the Federal Register about the information collections they are submitting to OMB, including a brief description of the need for the information and its proposed use and an estimate of the response burden. The purpose of this amendment, which OMB wholeheartedly supports, is to encourage more public comment on proposed information collections and to provide the public with relevant information on which to base comments. OMB encourages more public comment on all Federal information collections. We particularly encourage and invite members of Congress and the public to comment on the questionnaires for the 1990 Census, a data collection that affects every person in the nation.

* * *

Again, I appreciate this opportunity to discuss OMB's role and activities in connection with the planning for the 1990 Census. I would welcome any questions from the subcommittees.

ATTACHMENT 1

Clearance Requests Related to the 1990 Census Reviewed and Approved by OMB Since January 1, 1986

1986 Test Census of East Central MIssissippi -- Special Place Operations, 1986 Test Census of Central Los Angeles County -- Special Place Operation

1986 National Content Test -- Content Reinterview

1986 Test Census of Central Los Angeles County -- Content Reinterview; 1986 Test Census of East Central Mississippi -- Content Reinterview

Unit Status Review -- 1986 Test Census

1986 Test Census of Central Los Angeles County -- Census Community Awareness Program

Reinterview and Reconciliation -- 1986 Census of East Central Mississippi, and Central Los Angeles County

1987 Test Census -- Prelist Operation

1986 Test Census of Central Los Angeles -- Census Community Awareness Program Survey of Community Group Leaders

1986 Post Enumeration Survey of Central Los Angeles County

1986 Post Enumeration Survey of East Central Mississippi

1987 Test Census -- Advance Post Office Check

1986 Post Enumeration Survey Follow-up of Los Angeles

1987 Test Census of North Central North Dakota

Questionnaire Design Project for Decennial Census Forms

1990 Decennial Census: Local Review Program

1986 Post Enumeration Survey Follow-up of East Central Mississippi

1986 Preenumeration Survey Follow-up Form

1988 Census Dress Rehearsal -- Prelist Operation

1987 Test Census -- Precensus and Postcensus Local Review Recanvass

1987 Test Census of North Central North Dakota Conventional Listing Operations

1987 Test Census -- Group Quarters Enumeration

1987 Test Census -- Unit Status Review

1987 Test Census -- Educational Project

1987 Test Census -- Special Place Prelist

1876 Post Enumeration Survey of North Central North Dakota

Clearance Requests Currently Under Review

Test of North Central North Dakota -- Content Reinterview

1988 Dress Rehearsal Program -- Precanvass Operation

Prelist Operation -- 1990 Census

1987 Special Urban Survey

1988 Dress Rehearsal Advance Post Office Check Reconciliation

1988 Dress Rehearsal Special Place Prelist

ATTACHMENT 2

Members of Federal Agency Council

Office of Management and Budget

ACTION

Commission on Civil Rights

Department of Agriculture

Department of Commerce

Department of Defense

Department of Education

Department of Energy

Department of Health & Human Services

Department of Housing and Urban Development

Department of Interior

Department of Justice

Department of Labor

Department of Transportation

Department of the Treasury

Equal Employment Opportunity Commission

FEMA

National Commission on Libraries and Information Science

National Council on the Handicapped

National Endowment for the Arts

National Science Foundation

Office of Personnel Management

Veterans Administration

Answers to Questions from Senator David Pryor to Dr. Wendy Gramm in Letter of May 27, 1987

1. How have federal data needs changed since 1980, and how are these changes reflected in the development of the 1990 census questionnaires?

One of the major purposes of the Federal Agency Council for the 1990 Census was to identify changes in Federal data needs that should be taken into account in the development of the 1990 census questionnaires. In the course of its review of agency requirements for census data, the Council identified several items included in earlier censuses that are no longer needed. For example, questions on the number of bathrooms, the presence of air conditioning, and marital history will be dropped from the 1990 questionnaire because the Council determined there is no Federal need for this information. Because the General Revenue Sharing program no longer exists, it will not be necessary to sample as large a percentage of the population of certain areas in 1990 as in 1980 to gather income data.

The Council also identified several new areas where Federal agencies would like to collect data to support anticipated policy and program needs in the 1990s. For example, agencies would like to collect new data on congregate housing (housing where the rent includes meals) and more extensive data on the conditions of disabled persons.

Not all new Federal data requirements have to be met, or are most efficiently met, through the decennial census. The census is but one of many opportunities for the Federal government to gather data from households. Throughout the decade the government conducts several continuous household surveys and numerous one-time surveys on special subjects. To assure that the changing data needs of the Federal government are taken into account in these surveys, OMB recently organized a task force, including the agencies that sponsor the major Federal household surveys, to plan the redesign of these surveys following the 1990 census.

2. OMB Watch reported that Census scrapped plans for a congressionally mandated survey of the communications industry after losing a paperwork battle with OMB. How can you, OMB, stop an agency from carrying out a "mandated" study?

The report in OMB Watch does not correctly characterize OMB's actions with respect to the proposed Communications Services Survey.

This survey was submitted to OMB for review twice during 1986. The first time OMB disapproved the survey because the accompanying supporting statement did not contain sufficient information for OMB to complete its required review under the Paperwork Reduction Act. Two months after this disapproval, the Census Bureau resubmitted the survey. After reviewing it, OMB notified the Census Bureau that the survey would be approved if the burden estimates were revised (to reflect more realistically the time potential respondents had indicated it would take to provide the information requested) and if the survey were conducted on a voluntary basis, rather than on the mandatory basis that the Census Bureau was proposing. OMB was concerned that this survey did not meet the requirements established in Title 13 U.S.C. for mandatory surveys. We also believed that with appropriate attention to burden and other respondent concerns the Census Bureau could achieve a high rate of voluntary response.

The Bureau of the Census did not accept either of the two conditions and OMB disapproved the survey a second time. In our letter to the Commerce Department indicating disapproval, we noted the need for strengthening statistical coverage of the service sector of the economy, expressed our regret at the Census Bureau's resistance to using voluntary methods to establish a data collection program in the communications industry, and asked the Department to reconsider this position.

According to the Paperwork Reduction Act, to receive OMB approval for any information collection, the sponsor agency must balance its need for the information, and the practical utility of the information, against the burden on respondents and costs involved. That is, even if the information is being collected pursuant to a statutory requirement, OMB is still obligated by the Paperwork Reduction Act to ensure that the agency collects the information in the least burdensome way practicable. Thus, in all proposed information collections OMB may prescribe the conditions of collection to assure that burden is minimized and that the methods of collection are consistent with government-wide information and statistical policies.

In the case of the Survey of Communications Services (for which there was no statutory requirement), OMB did not dispute the agency's need for the data collection, but insisted that the Census Bureau accept full responsibility for the reporting burden necessary to conduct the survey and avoid collection methods that exacerbate the burden. Mandatory reporting places an additional burden on respondents to assure they have met all legal requirements. It also gives agencies a weaker incentive to minimize burden through careful sample and questionnaire design than they have in voluntary surveys, where they must deal with burden issues as a prerequisite for gaining the cooperation of respondents.

The authority of the Census Bureau to require responses to an intercensal survey is limited by Title 13 to inquiries within the scope of questionnaires used in connection with the taking of a complete census. In the past OMB has approved certain mandatory surveys on subjects that were not covered in a prior census, on the assurance of the Census Bureau that such subjects would be included in the next complete census. In the case of the Survey of Communications Services, the information had not been collected in the 1982 Economic Censuses and the Bureau could provide no assurance that the information would be collected in the 1987 Censuses. This raised serious questions about the Census Bureau's interpretation of its authority to impose penalties provided in Title 13.

A recent OMB study of over 600 surveys of businesses carried out by seven Federal agencies showed no significant difference in rates of response on mandatory and voluntary surveys. It also showed that several agencies that lack statutory authority to penalize nonrespondents have managed, through careful attention to survey design and the concerns of respondents, to achieve high rates of response on voluntary data collections. The Census Bureau itself achieves similar rates of response in its voluntary and mandatory surveys. In the OMB study, the Census Bureau's surveys averaged a final response rate for mandatory surveys of 83 percent and for voluntary surveys of 79 percent. Thus OMB found no adequate justification for invoking mandatory reporting authority in this new survey, especially when it was based on a questionable interpretation of Title 13 authority.

3. The justifications given for decennial census questions frequently indicate that collection is required or mandated by law. Has OMB ever reviewed the statutory citations to see if the Census is actually the required collection vehicle? If not, why? If OMB has, what did you find?

Yes, OMB has reviewed the statutory citations to determine whether the decennial census is the required data collection vehicle. We asked members of the Federal Agency Council to report their uses of data from the 1980 census, the statutes that require the use of these data, and whether the decennial census is mentioned as the required source in the statute. If the agency reported that the statute required the use of decennial census data, we checked the statute.

There are relatively few instances where the law either requires that given data be collected in the census or specifies that data collected in the census be used for given purposes. The decennial census population count is required by the Constitution as the basis for apportionment of the U.S. House of Representatives. The decennial census population data classified by race, Spanish origin, and voting age by blocks are needed to meet various legal requirements in connection with the redistricting of State legislatures. In reviewing the statutory citations submitted by the agencies, we found several cases where the legislation uses generic terms such as a "Federal census" or "the Census Bureau," without specifying the decennial census. In most of these cases, the data in question are only available from the decennial census for the geographic areas specified by statute. In a few cases we did find that the law specifies the decennial census as the source. For example, the Community Development Block Grant (CDBG) legislation defines "age of housing" and "extent of housing overcrowding" in terms of data compiled by the United States Bureau of the Census, referable to the same point or period of time, available from the latest decennial census.

For many of the items on the 1980 census questionnaire, there was neither any statutory requirement to collect the data in the census nor any statutory specification that would preclude the use of other data.

4. Practical utility is supposed to be an important consideration in whether to collect data? Have you examined whether all the data collected in 1980 was actually tabulated and used?

We did examine whether all the 1980 census items were tabulated and used. Some items on the census questionnaire were not intended to be tabulated, but rather to serve as "screeners" or to enable the Census Bureau to edit the completed questionnaires and code responses. Data used for such purposes would generally meet the practical utility criterion of the Paperwork Reduction Act.

We are concerned that some data from the 1980 census were not made available in a form that maximized their usefulness. In some cases, data were coded only for selected categories (for example, the coding of the ancestry question assigned a maximum of two categories). Some data were only published in summary tabulations. If users want other tabulations or cross-tabulations, they must request special tabulations from the Census Bureau that sometimes take a long time to prepare. Some 1980 census data were not processed and published until mid-decade.

The Paperwork Reduction Act as amended in 1986 has as one of its purposes "to maximize the usefulness of information collected, maintained, and disseminated by the Federal government." In reviewing the 1990 census questionnaires, OMB will therefore be concerned with assuring not only that data will be used but that they will be processed and published in a manner that maximizes their usefulness.

TESTIMONY

OF

JERRY J. BERMAN

DIRECTOR
ACLU PROJECT ON PRIVACY AND TECHNOLOGY

ON

THE 1990 CENSUS AND PRIVACY

BEFORE THE

SENATE SUBCOMMITTEE ON
FEDERAL SERVICES, POST OFFICE AND CIVIL SERVICE

AND

THE HOUSE SUBCOMMITTEE ON CENSUS AND POPULATION

MAY 14, 1987

Mr. Chairman and Members of the Committees:

Introduction:

On behalf of the American Civil Liberties Union, I want to thank you for requesting our testimony today on privacy issues posed by the 1990 Census. As you know, the American Civil Liberties Union is a non-partisan organization of over 250,000 members dedicated to the defense and enhancement of civil liberties.

Over the last three years, I have directed an ACLU Project on Privacy and Technology which is examining the impact of new communications and computer technology on citizen privacy. A central issue for the Project is the protection of citizen privacy in an era of advanced computer technology which permits government and other institutions to collect, store, and disseminate considerable personal information about citizens.

We testify today for one purpose: to urge the Congress in planning for the 1990 Census to undertake a careful and systematic examination of Administration plans and procedures for protecting the privacy and confidentiality of census data.

The Ultimate Data Bank

While all of us recognize the importance of the Census and the myriad of public functions carried out on the basis of census data---from distributing government welfare funds to insuring voting rights--it must also be emphasized that when the 1990 census is complete, it will constitute the penultimate computerized "data bank" on every person in the United States.

As contrasted with the first Census conducted 200 years ago under the direction of Secretary of State Thomas Jefferson to count the population for the constitutionally mandated purpose of ensuring that seats in the House of Representatives are divided fairly among the states, the 1990 Census, guided by a myriad of public policy purposes, will involve the compulsory gathering of detailed personal data on 250 million persons, including the name, age, race, sex, and marital status of every person, and income, ancestry, employment, health, and financial status of a large sample of persons in the United States.

Why A Privacy Examination?

In urging the Congress to worry about the privacy and confidentiality of census data, we are not suggesting that census data is being misused or that the Census Bureau is not concerned about these matters. Quite the contrary.

Since last summer, we have had several meetings with Commerce and Census officials to discuss privacy and confidentiality matters. Based on these discussions, we believe the Census Bureau is dedicated to its statutory mandate to protect census data from unauthorized access or possible misuse. Nevertheless, there are a number of reasons why it is essential for the Congress to make its own inquiry and establish on the public record that privacy and confidentiality issues are being properly addressed by the Administration:

First, as we have already mentioned, census data is extremely sensitive. Under penalty of law, every question must be answered. The compulsory nature of the questions make

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confidentiality of the data all the more critical.

Second, while there have been few documented abuses of the census throughout our history, we must not ignore the fact that abuses have occurred. As David Burnham has pointed out in his book, The Rise of the Computer State, census data was turned over to the government to locate possible draft dodgers during World War I and detailed microdata was turned over to the government to locate citizens of Japanese ancestry for internment at the outset of World War II.

Third, the viability of the Census itself ultimately turns on public confidence in protection of census data. Only this Sunday, the Washington Post carried a story filed in Bonn West Germany under the headline "Question in W. German Census is Whether 2 million People Will Boycott It." As you may know, public fears about possible misuse of census data and a perception by a solid minority of the German population that the census constitutes "the rise of a surveillance society" have caused the Census to be postponed in West Germany since 1970. Serious census boycotts have also been mounted in Sweden, Norway and the Netherlands.A privacy inquiry could help to maintain public confidence in our census.

Privacy Concerns

Today, we would like to suggest some of the questions and lines of inquiry on confidentiality and privacy that we would like to see the Congress pursue as it oversees planning for the implementation of the 1990 Census. We suggest questions both to identify privacy issues and to establish what procedures and

practices the Census Bureau has developed for protecting privacy and confidentiality.

First, the Congress should examine the necessity for each question asked on the short and long forms. Every additional question asked makes the Census a more intrusive examination of the population and should be weighed on a balance scale of public importance as one measure and privacy as the other. In the interest of privacy, only essential questions should be asked.

Second, the Congress should examine the necessity of requiring compulsory answers to all questions and internal means for protecting personal information supplied to the Census Bureau. Because of privacy concerns, the ACLU believes that race and ethnicity questions should be voluntary unless procedures are adopted which separate name and other personal identifiers from each data file. What is the argument against such a procedure? Would making some questions voluntary significantly impair the reliability of census data or in fact make citizens more forthcoming?

Third, the Congress should examine the security measures enforced by the Census to protect data when collected and any past breaches of such procedures. For example, the Census Bureau should describe on the record whether or not census data transmissions are encrypted and how computerized census data bases are protected against unauthorized access or penetration. Are enumerators---mostly temporary hires---adequately trained on confidentiality matters and are there auditing techniques employed to insure that enumerators do not turn over census forms to unauthorized outsiders?

Fourth, and most important, the Congress should examine the procedures for protecting the confidentiality of census data disseminated to the government and private sector to insure that census data may not result in the disclosure of personal information which may be used to the detriment of any person.

It is common knowledge that other government agencies such as the Internal Revenue Service and private marketing and political organizations are using census data in combination with other computerized data to identify target subgroups for numerous purposes.

According to the Census Bureau---which is well aware of the practice---effective "disclosure avoidance" techniques are in place which insure that released data can not be "disaggregated" to an extent that would permit individual identification of citizens or persons. It is our understanding, however, that the Census Bureau has developed these techniques through mathematical standards. According to one official, the Bureau "does not have at its disposal the tools or staff necessary to perform a thorough disclosure risk analysis...so its determinations, although based upon...information and expertise....remain subjective."

We believe more should be done by the Congress to understand "disclosure avoidance." One avenue is to request testimony from outside experts on how private sector firms use census data to identify target populations and gain some independent knowledge about how sophisticated this has become. Another possibility is for the Congress to appropriate funds for a "thorough disclosure

risk analysis" which could include some field tests of Census Bureau disclosure avoidance protocols.

The most important aspect of this particular inquiry is to insure that census data is not and will not be used by government to the detriment of any person. Congress should inquire whether the IRS is able to use census data to detect non-payers or underpayers of income taxes or whether certain race, ancestry, or country of origin questions may be used by the INS to identify target groups of "illegal aliens" for deportation purposes.

Under Section 8 of Title 13, the law states that "in no case shall information be used to the detriment of any respondent or other person to whom such information relates, except in the prosecution of alleged violations of this title." While this provision clearly applies to the Census Bureau and covers its disclosure practices, it is not clear that other government agencies are barred from using census data "to the detriment of any respondent."

In our view, such uses of census data, regardless of law enforcement agency responsibility to enforce the laws of the United States, would violate citizen privacy and undermine the integrity of the census. Congress should determine that this is not being done and that no agency will be able to use the 1990 census in this way. Congress should even consider clarifying language which would clearly prohibit the use of census data for such purposes.

Conclusion

In conclusion, let me reiterate that the census is vital to

the functioning of government and our representative democracy. The same holds true for citizen privacy in the computer age. The issue of privacy and confidentiality of census data must be addressed to insure privacy and continuing public support and cooperation with the census process.

Thank you for this opportunity to testify today.

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QUESTIONS SUBMITTED BY SENATOR DAVID PRYOR
TO THE
AMERICAN CIVIL LIBERTIES UNION

Question # 1. Questions pertaining to race, ethnicity and national origin seems to generate a great deal of interest. You suggest that these questions be made voluntary on privacy grounds. Some groups have indicated that they even want more detailed mandatory questions in these areas. A recent L.A. Times article indicates that tensions relative to such questions are running high in some parts of the Hispanic community. Why would some groups support such questions and others find them so objectionable?

Answer: The request for more detailed information has come from the ethnic communities. Accurate counts of minorities are necessary for federal programs aimed at those groups. The concern of the groups that ask for more detailed information is simply that the minority population be counted. Public outreach is important to these groups, and there is the suggestion that the INS have a moratorium on law enforcement activities during the taking of the Census so that people will not be afraid to answer the questions.

Other groups are concerned with confidentiality. There is fear that groups of illegal immigrants will be found from census data, and that the INS will use this information for deportation purposes. To these groups, the INS moratorium is simply a temporary measure, and does not guarantee protection in the future from disclosure of information.

Question # 2. You quote a Census official as stating that the Bureau does not have the capability to perform a thorough risk analysis. Does this mean that Census is not monitoring technological advances that might enable others to disaggregate data--to defeat Census' disclosure avoidance techniques?

Answer: We do not mean to imply that the Census Bureau is not monitoring technological advances that might enable others to disaggregate data. However, a Census official did state that the Bureau "does not have at its disposal the tools or staff necessary to perform a thorough disclosure risk analysis . . . so its determinations, although based upon . . . information and expertise . . . remain subjective." As technology becomes more and more sophisticated, so does the expertise of "hackers". While the bureau does mathematical calculations to determine risk, we do not know of experiments they have done with actual computer experts trying to gain access to the data.

But the problem is not only with "hackers" illegally trying to gain access. As David Burnham pointed out in his testimony, "the merger of general census data with specific information developed by private companies and state licensing agencies may result in serious invasions of personal privacy." The IRS, for instance tried an (unsuccessful) comparison of names of individuals on a marketing list to try to spot "non-filers". The marketing list was "nothing but a marriage of the census tract data and names and addresses developed by the telephone companies and the state motor vehicle departments." The Census Bureau has no control over how other agencies may use census data in combination with other data to identify, if not individual persons, specific sub-groups.

Question # 3. If you read the justifications provided by agencies for the collection of data, it looks as though the use of the decennial census is "the" required means of collections. On closer examination one finds that very few statutes require data to be census-based. Moreover, hardly any of the statutes in question compel a response from individuals. Nevertheless, once a question finds its way onto the census form, individuals are compelled to respond. What do you think of this bootstrapping--is it legal?

Answer: We think that you raise an important question. We will continue to do research on this, and would suggest that you get a separate legal opinion on it, perhaps from the Congressional Research Service. While it is not specified in statutes that require data to be collected, which agency is to collect it, much of it falls to the Census Bureau "by default". If "bootstrapping" does take place, this underscores our position that many questions should be voluntary. Alternatively, Congress could consider mandating that only <u>essential</u> questions be asked. While these questions may be mandatory, at least the scope of the data collected would be limited.

AMERICAN CIVIL LIBERTIES UNION

QUESTIONS SUBMITTED BY CONGRESSMAN MERVYN M. DYMALLY

Question # 1. In your testimony, you suggest that the questions relating to race and Spanish/Hispanic origin on the 100% form should be voluntary. While I fully understand your concerns about privacy, organizations representing racial and ethnic minorities strongly oppose this idea, because they believe the data collected would then be inaccurate and essentially worthless.

Answer: We are sympathetic to the concerns of the groups in the ethnic minority community that would require mandatory responses to race and ethnicity questions. In our own organization we are dependent on detailed census data to help enforce voting rights laws. However, our concern is with census data being used to the detriment of the individual. Census data was used in World War II to round up Japanese Americans for interment camps. If it is important to the future of this country that questions be answered, and be answered accurately, it is equally important that the law be amended to prohibit any government agency from using census data to the detriment of any individual.

The minority communities should have great concern with this. The very fact that many people are afraid to answer the census, because of fear of the INS or a housing agency, or some other agency, has been one of the reasons for the extensive undercount. If confidentiality were a statutorily guaranteed right, people would be more forthright in answering questions.

You may remember that in our testimony, we recommend an amendment to Section 8 of Title 13 which states that "in no case shall information be used to the detriment of any respondent or other person to whom such information relates, except in the prosecution of alleged violation of this title." While this provision clearly applies to the Census Bureau and covers its disclosure practices, it is not clear that other government agencies are barred from using census data "to the detriment of any respondent." In our view, such uses of census data, regardless of law enforcement agency responsibility to enforce the laws of the United States, would violate citizen privacy and undermine the integrity of the census. We would urge Congress to consider such clarifying language which would clearly prohibit the use of census data for such purposes.

Testimony

of

David Burnham

On the 1990 Census and Privacy

before the

Senate Subcommittee on Federal Services,

Post Office and Civil Service

and

The House Committee on Census and Population

May 14, 1987.

Mr Chairman and Members of the Committee:

My name is David Burnham. For the last ten years, I have been investigating the impact of the new computer and communication technologies on all aspects of American life. I have undertaken these investigations as a reporter in the Washington Bureau of The New York Times and while researching and writing The Rise of the Computer State, a book published in the United States, Great Britain and Japan in 1983 and 1984. I am currently working on a book about the Internal Revenue Service.

One key focus of my overall investigation has been the United States Census Bureau and all the institutions that use its information for their widely varying purposes.

It is a truism that the Census Bureau has been an essential element of the government since its founding 200 years ago. The accurate re-apportionment of seats in the House of Representatives, the distribution of tax dollars under several major federal programs, the planning of vital housing, school and transportation projects all would be impossible without the detailed population counts of the Census Bureau.

Census information also is the fundamental building block upon which all commercial and political marketing rest. Without

such marketing techniques, today's form of representative democracy could not exist. Without these techniques, the American economy would collapse.

The absolutely essential quality of census data to virtually every aspect of American life makes it an extraordinarily precious commodity, something which requires the most careful kinds of protection. It is hard to over estimate the serious consequences to the United States should the Census Bureau be perverted or should a substantial number of American people come to believe it had been perverted.

The dangers I refer to are not hypothetical. The United States government has in fact used Census data for improper purposes. So have other nations.

Even without recent specific abuses, however, the acknowledged power of census information today has created a political climate in two of Europe's most sophisticated and democratic nations -- West Germany and the Netherlands-- which has prevented their governments from taking a national census for almost two decades.

There is considerably irony in the fact that the widespread opposition to the census in the Netherlands is partly based on the knowledge that the German Army during World War Two used census data to control the Dutch people, especially its Jewish citizens.

There has been no national census in the Netherlands since 1971. During an interview two years ago, Jacob Schmitz, an official of the Netherlands government, told me that a series of polls in his country had shown that there was so much distrust of the census mechanism that approximately one third of the Dutch people had decided they would not cooperate with the Census takers. Mr. Schmitz added that the number of those who said they would not provide truthful answers was so high that it would be impossible to guarantee an accurate national census.

In Germany, the last population and housing census was conducted in 1970. Since 1982, the opposition has been led by the Green Party, formed in the late 1970's as a grass roots campaign to protect the environment. But during the intervening years, opposition to the census has developed among a surprisingly large range of German people.

One outgrowth of this fairly recent census phobia was a rash of more than 1,000 suits challenging the legality of the Census. In April of 1983; the Constitutional Court of Germany issued an injunction postponing the Census until the judges had time to hold hearings on the matter. In December of 1983, the court issued its final decision, requiring the government to submit a broad new legislative proposal to authorize a national census, including a range of additional privacy safeguards.

In its decision, the court said that "the free development of the personality requires protection of the individual against the unlimited collection, storage, use and transmission of

personal date in modern times." The court laid down a proposed set of rules aimed at giving each citizen what it called "informational self determination."

The government, responding to this court order, submitted new authorizing legislation to the Bundestag. As a result of the legislative approval of the revised census, the German government will undertake a national head count next week.

Despite the additional safeguards mandated by the court, however, the deep concern of many German people has not been dissipated and it is not clear whether the census will be successful. According to recent reports in The Washington Post and The New York Times, the government estimates that only 85 percent of the population now plans to answer all the questions of the Census. Between 3 and 5 percent have decided to boycott the census, while another 10 or 11 percent have not made up their minds how they will respond. But if five percent of the population boycott the census, and an additional percentage give false or incomplete information, the results of the national census could be seriously flawed.

Not surprisingly, the government of Germany argues that the public concern is misguided. And perhaps it is. But there have been enough actual misuses of Census data to give some legitimacy to the worries.

In a report prepared several years ago, for example, Vincent Baraba, the director of the Census Bureau under both President Nixon and President Carter, acknowledged that during the First

World War the Bureau had in fact provided law enforcement officials the specific names and addresses of possible draft dodgers.

The Second World War experience with the Japanese Americans is considerably more ambiguous. On February 19, 1943, nine weeks after Pearl Harbor, President Roosevelt issued an executive order authorizing the round up of all Japanese Americans living on the West Coast. The United States Army, which was put in charge of the roundup, asked the Census Bureau for the names and address of the Japanese Americans it had collected while conducting the 1940 Census. The Census Bureau refused this request on the grounds that it would violate the law.

But using an early version of the computer, the Census Bureau provided the Army and the Justice Department other significant assistance. A young Texas lawyer named tom Clark, subsequently a member of the Supreme Court, was the Justice Department's coordinator of alien control. In an interview now contained in the Earl Warren Oral Library Project at the University of California in Berkeley, Clark described this contribution.

The Census Bureau, Clark explained, "would lay out on a table various city blocks where the Japanese lived and would tell me how many were living in each block. A processing station, as it was called, would then be opened up in the designated area, and all the persons of Japanese descent were directed to report to that station."

Thus, at the end of each roundup, the Army would have a very precise knowledge of whether it had picked up all the Japanese Americans living in each neighborhood.

Calvert L. Dedrick was the Census Bureau offical who worked with Clark. In an interview in 1979, Dedrick told me he was astonished by how accurate the 1940 Census data was and how law abiding the Japanese Americans were. "In the end, there was only a very small different between the number of Japanese Americans identified in the census and those who were taken to the camps," he said.

This story illustrates that in some circumstances aggregate information about a given race or ethnic group can be almost as dangerous as data concerning the name and address of specific individuals.

With the development of the computer, the potential hazards of the misuse of aggregate information multiply. A few years ago, for example, the Internal Revenue Service launched an experimental project to determine whether the marketing lists sold to political and commercial advertising consultants might help the IRS identify individuals who failed to file any income tax return.

The IRS thought that a comparison of the names of all the individuals on the marketing list against the names of those who actually filed a return would allow them to spot the non-filers. The marketing list, of course, is nothing but a marriage of the Census tract data collected by the Census Bureau and names and

addresses developed by the telephone companies and the state motor vehicle departments.

The marketing companies vehemently and unsuccessfully opposed the IRS experiment. And of course, the Census Bureau has little control over how the marketing companies enhance the Census data. But the merger of general census data with specific information developed by private companies and state licensing agencies may result in serious invasions of personal privacy, especially in situations where the new information is used for quasi law enforcement purposes.

Developing appropriate remedies will not be easy. I personally am not sure how I would go about designing improved legal safeguards for census data. But the current census revolutions in West Germany and the Netherlands, the specific occasions when census information has been abused in the past and the astounding speed with which computers are becoming the essential workhorse of every public and bureaucracy, all argue that the search for such safeguards may be one of the most important challenges of our day.

UNITED STATES DEPARTMENT OF
COMMERCE
NEWS
WASHINGTON, D.C. 20230

BUREAU OF
THE
CENSUS

THE 1990 CENSUS QUESTIONNAIRE

DR. JOHN G. KEANE
DIRECTOR, BUREAU OF THE CENSUS
WASHINGTON, D.C.

SUBCOMMITTEE ON FEDERAL SERVICES, POST OFFICE, AND CIVIL SERVICE
GOVERNMENTAL AFFAIRS COMMITTEE
UNITED STATES SENATE

AND

SUBCOMMITTEE ON CENSUS AND POPULATION
POST OFFICE AND CIVIL SERVICE COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

May 14, 1987

INTRODUCTION

It is a pleasure to be here today to discuss the content, questionnaire design, and data products for the 1990 Census of Population and Housing.

Selecting the questionnaire content is one of the most important preparatory actions we must take in planning the census. Your concern about this matter is very much appreciated. Given the many important uses of census data, it is essential that the questionnaire include those subjects and questions that will yield the data to meet our Nation's needs in the 1990s.

The 1990 Census of Population and Housing will mark the bicentennial of census-taking in our country. From the very first enumeration in 1790, the census has always been more than a simple headcount of the population. It has asked questions that mirror the concerns of our society. Over the decades, as our society became more complex and our government more sophisticated, the census questionnaire changed to reflect the new needs.

Title 13 of the U.S. code specifies two dates for us to report to you about our content plans: By April 1, 1987, we were to report to you on the questionnaire subjects or topics we plan to ask in 1990. We reported to you in late March, and I will be discussing the planned subjects today. By April 1, 1988, we must report to you on the actual questions we plan to ask.

Today I first will review our process for determining the questionnaire subjects. Second, I will describe the subjects we plan to include.

Third, I will touch on questionnaire design issues. Fourth, I will describe our data product plans. And, fifth, I will provide an update on the "family of minicomputers" procurement.

PROCESS FOR DETERMINING QUESTIONNAIRE SUBJECTS

In determining the questionnaire content for the 1990 census, we had one overriding goal--to balance the needs for data against the length of the census questionnaire and the amount of time it may take respondents to fill it out. We realize that public cooperation could be undermined if the census questionnaire is too lengthy or contains questions that do not meet important public needs. We operated under the assumption that there should be no increase over 1980 in questionnaire content for the 1990 census.

As we held discussions with data users, we heard many more legitimate and valid data needs than we could reasonably satisfy. A general principle governed the selection of content for the census: The census must be aimed solely at data needed to fulfill legal mandates or implement governmental programs or that are needed to meet broad societal needs. In addition, we were guided by several other principles: (1) the data should be needed for small geographical areas or for numerically small populations, (2) the questions should yield accurate data, and (3) the content should be suitable for self-enumeration.

Data User Input

We held discussions with data users in a number of forums to make sure we got the proper advice on what topics should be asked in 1990. The subjects we plan to ask result from a thorough examination of recommendations made by the general public; officials in Federal, state, and local governments; members of the business and academic communities; and minority group leaders. Because of our extensive consultation with data users, the 1990 census questionnaire truly can be considered a national document.

Local Public Meetings (LPMs), cosponsored by the Census Bureau and local and state organizations, were primary sources of information on the uses of the data at the state and local level. The LPMs afforded a wide variety of users, from the private and public sectors alike, the opportunity to comment on the adequacy of the 1980 data and to suggest new or modified data elements for the upcoming census. At least one meeting was held in every state, the District of Columbia, Puerto Rico, and the Virgin Islands, and we completed the last of the 65 meetings in October 1985.

We sponsored conferences with representatives of public and private organizations and of minority and ethnic groups to obtain information about their special data needs. We also consulted with the census advisory committees on this matter and held regional meetings with American Indian representatives.

For determining Federal data needs, we sought counsel from other agencies through 10 Interagency Working Groups and through OMB's Federal Agency Council on the 1990 Census. We asked the Federal agencies to identify

all legal mandates or Federal programs requiring certain data. These exchanges have been important channels of communication.

Members of Congress also have played an important role in content development by forwarding your recommendations and those of your constituents.

Formal Testing

We tested new items and modified wording proposed by various experts, as well as format or sequencing for questions that were asked in the previous census. The testing program helped us determine which of the many valid data needs could be pursued for the census.

We conducted limited content testing in the test censuses in 1985 and 1986. The 1986 National Content Test was our main testing vehicle. This test was designed to provide information on the accuracy of the data collected and the ability and willingness of respondents to answer the questions. We completed our analysis of the National Content Test results early this year.

This year we plan to conduct the Special Urban Survey--a sample of about 27,000 households--to further test selected population and housing items. For example, preliminary results from the National Content Test indicated that further testing was needed on refinements for the race and Spanish-origin questions. My staff recently briefed the subcommittee staffs on the status of planning for these questions and on the extensive consultation and testing process that led to our current plans. In our submission

of the Special Urban Survey to the Office of Management and Budget (OMB), we have proposed to test the housing quality questions recommended by the Housing Statistics Users Group.

We are also in the process of contracting with three private research firms to conduct in-depth interviews with selected groups to fine-tune the terminology and instructions for the race and Spanish-origin questions. This "focus group" research will be conducted this summer.

1990 CENSUS SUBJECTS

Population and Housing Subjects

Now I will turn to my second topic--the subjects we plan to cover in the 1990 Census of Population and Housing. The questionnaires will be about the same length as those for the 1980 census. We have accomplished our goal of balancing data needs against the length of time it takes householders to fill the questionnaires. Although we are eliminating more topics than we are adding, we plan to expand some, such as education and disability; so there is little net effect in the questionnaire size.

As in previous censuses, we will have two main questionnaires--a short form and a long form. The short form will contain the basic population and housing subjects asked of all persons and housing units; the long form will contain these same basic subjects plus additional population and housing items asked only of a sample of persons and housing units. We refer to the basic subjects that appear on both the short and long forms as the 100-percent subjects. We refer to those that appear only on the long form as the sample subjects.

In 1980, the sample size was 1-in-6, except in places with fewer than 2,500 people. Here the sample size was 1-in-2 to provide better sample data (particularly income data) for the smaller places. We are still examining the sample design for 1990, and plan to make a decision this year.

100-Percent Population

We plan to ask the same 100-percent population topics as in the 1980 census: name, relationship to other members of the household, sex, race, age, marital status, and Spanish or Hispanic origin.

100-Percent Housing

The 100-percent housing topics we plan to ask in 1990 are also very similar to those we asked in 1980. We again plan to ask whether the unit has complete plumbing facilities, number of rooms, tenure (whether the unit is owned or rented and whether it is part of a condominium), the value of the property or the amount of the monthly rent, and the characteristics of vacant units.

We are planning the following changes to the 100-percent housing questions: We are dropping the question on access to living quarters, which we used in 1980 to help define a housing unit. We will use direct access as a criterion in our pre-census address listing operations. We believe that this will provide adequate assurance that the integrity of the housing unit definition will be maintained, and, therefore, we see no need to include the direct access question.

We are dropping the 1980 short-form question on "number of units at address" and are replacing it with the 1980 sample question on "number of units in structure." The question on "units in structure" tends to produce more accurate data because many respondents are biased toward answering "1" to a question on "units at address." This is because in multi-unit structures some respondents confuse the basic street address (e.g., 101 Main St.) with the address for their particular unit (e.g., 101 Main St., Apt. A).

We are moving the question on the presence of a telephone in the living quarters from the long form to the short form and are combining it with the request for a telephone number, which, in 1980, appeared on the back page of all questionnaires. We believe that this change will lead to more complete reporting of telephone numbers and will make it possible for us to do more telephone callbacks (and less costly field work) when a questionnaire is incomplete. The telephone numbers will not be coded and entered into the computer, as they are collected for administrative purposes only and are not data items.

We plan to add a new question to identify congregate housing. Congregate housing refers to housing in which the cost of meals is included in the rent or obtained on a contractual basis. A growing number of elderly live in such situations. This addition reflects the broad interest of public policy planners in the aging and disabled populations and will improve the socioeconomic profiles of these groups. This item, which asks "are meals included in the rent," will also help to produce more accurate rent statistics.

At the hearing on content a year ago, the General Accounting Office testified, based on their discussions with some Federal housing data users, that most of the 100-percent housing subjects we asked in the 1980 census were not needed at the block level, i.e., that they could be taken off the short form and included on the long form. We stated at that time that all of the 100-percent housing subjects were supported for inclusion on the short-form by the Interagency Working Group on housing issues, which included representatives from Federal agencies that administer housing programs. Furthermore, the questions also received strong support from local planners, including those from urban centers who are major users of the data for census blocks within their cities.

We stated that several of the 100-percent housing questions--number of units in the structure, tenure, and to some extent, number of rooms--are essential to help us define housing units and assure complete coverage of the housing and population universes. The 100-percent housing questions also serve to provide benchmark data that make it possible to use the information in the sample questions. And for some characteristics, such as whether a housing unit is part of a condominium, the universe is too small to allow us to collect adequate data on a sample basis.

Since the hearing last year, we received over 50 letters from local planners strongly supporting the 100-percent housing questions. Most of the letters were the result of surveys conducted by the American Planning Association and the National Association of Housing and Redevelopment Officials. Also since the last hearing, the General Accounting Office conducted its own survey among a sample of local planners representing large and small cities and

counties. As their report indicates, they found widespread use of the 100 percent housing data.

Sample Population

We are dropping three sample population subjects because our discussions with data users revealed limited uses for the items. These topics are weeks looking for work in the previous year, activity 5 years ago (i.e., whether in a job, college, or the Armed Forces), and marital history. We are not adding any new sample population subjects, but we plan to expand some of the subjects. The topics we plan to ask in 1990 are: educational enrollment and attainment; place of birth, citizenship, and year of entry into the United States; ancestry; language spoken at home; migration (where the person lived 5 years ago); disability; fertility (number of babies ever borne by a mother); veteran status; employment and unemployment; occupation, industry, and class of worker (i.e., private company, government, self-employed); place of work and commuting to work; and work experience and income in the year before the census (1989).

Sample Housing

We plan to eliminate four sample housing subjects, again because data users revealed limited use for the items. These four topics are: the number of stories and presence of an elevator in the structure; the type of cooking fuel; the presence of air conditioning; and the number of bathrooms. As I mentioned earlier, we are moving two 1980 sample questions--telephones and "units in structure"--to the short form. On the strong recommendations of the Housing Statistics Users Group, we are proposing

to include a new sample housing subject--housing quality. We are proposing to conduct further field tests of housing quality items. The analysis of the test data would be available by the end of this year. We would make a final determination on the housing quality questions at that time.

The other housing sample subjects we plan to include for 1990 were asked in 1980. These are: the type of heating equipment and fuels; source of water and method of sewage disposal; the number of automobiles, light trucks, and vans (two separate questions in 1980; one for 1990); kitchen facilities; the year the structure was built; the year the householder moved into the housing unit; the number of bedrooms; the screening question to determine if a housing unit is on a farm; and shelter costs, including utility costs.

Summary of Subject Changes

In summary, Mr. Chairman, we are planning minor changes to questionnaire subjects for the 1990 census. We are dropping more topics than we are adding. Byidoing so, we can expand the number of questions about some subjects, such as disability, at the recommendation of data users. We believe that the subjects we plan to ask will adequately meet data needs for the 1990's without imposing an undue burden on the public. All of the topics we plan to ask are required to fulfill legal mandates or to meet broad societal needs. We have provided you with descriptions and uses for each question in the background materials. We transmitted more detailed justifications earlier to the subcommittee staffs.

The questionnaire subjects I have described (except for housing quality) will be included in the Dress Rehearsal short-form and long-form questionnaires.

We expect the wording of the Dress Rehearsal questionnaires will be very similar to the final 1990 questionnaires, but there may be minor changes based on the results of the Special Urban Survey and focus groups we are conducting this year. We plan to submit the Dress Rehearsal questionnaires to the Office of Management and Budget this month and the questionnaires will be sent to print in late summer or early Fall.

The subject content I have just described relates only to the questionnaires for the 50 states and the District of Columbia. The 1990 census also will cover Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, and the Virgin Islands of the United States. We have met with representatives from these areas and we continue to work with them to determine the subjects for their 1990 census questionnaires. We expect the topics for their censuses to be similar to those for the states; however, there may be modifications to some questions in response to the specialized data needs of the inhabitants of these areas.

QUESTIONNAIRE DESIGN ISSUES

The third topic I will discuss is questionnaire design. For the 1990 census, as for previous censuses, we are giving considerable attention to questionnaire design issues. Our goal is to improve questionnaire wording and format and, thus, contribute to improved mail response in the census.

Earlier, I discussed our program to test new questionnaire items, and modified wording, format, or sequencing for questions that were asked in the previous census. This content testing program includes the 1986 National Content Test and 1987 Special Urban Survey.

Questionnaire Design Project

As part of our questionnaire research, we have also initiated the Questionnaire Design Project to conduct research on how the design and wording of the census long form affects the respondents' ability to complete it correctly. The goal of this research program is to improve census forms and thereby increase the quality of the data and the level of mail returns.

This project, which is still underway, has both a short-term goal and a long-term goal. The short-term goal is to provide information that can lead to improvements in the 1990 questionnaire. The long-term goal is to identify changes (potentially more extensive) that can be tested for use in future censuses and ongoing Census Bureau programs.

Early research from the Questionnaire Design Project already has led to the redesign of some features of the Dress Rehearsal questionnaire. For example, we are restructuring the instructions on whom to include and not to include on the questionnaire and reformatting Question 1, which is the list of persons in the household. These changes simplify and make clearer this key question that will determine who is or is not included on the questionnaire.

Although the Questionnaire Design Project will be completed after the Dress Rehearsal questionnaire has gone to print, we will thoroughly examine the results to see if there are minor changes we can incorporate into the 1990 questionnaire. Question wording changes at that point are unlikely, but it will be possible to make changes to the instructions, questionnaire cover, and format, should they be warranted by the test results.

The Questionnaire Design Project has three parts, and I briefly will describe each of them. The first part of the program involves work by an outside consultant. In September 1985, we awarded a contract to a survey research consultant to identify problems in filling out the census long form and to develop questionnaires that alleviate those problems. The contractor observed respondents completing long forms (those used in the 1986 Census of Central Los Angeles County) and used this information to identify problems with the structure of the questionnaire and the concepts included in the questions. The contractor has submitted preliminary observations and questionnaire suggestions. The contractor's final work will be completed this Spring.

The second part of the Questionnaire Design Project consists of research conducted within the Census Bureau. Our staff has conducted two sets of observations of people filling out the 1986 Los Angeles test long form. The observers noted any problems the respondents had and developed an alternative questionnaire based on these observations. We are currently conducting a small field test of this alternative questionnaire compared to the 1986 Los Angeles questionnaire. The test is being conducted out of four of our regional offices and will involve a total of about 600 persons, half of whom will answer the alternative questionnaire and half, the Los Angeles questionnaire. Results of this study should be available in July or August.

The third part of the Questionnaire Design Project is a national sample survey of about 14,000 households that we will conduct in early 1988.

We will test a standard questionnaire versus several alternative versions developed during the two parts of the project described earlier. The persons observed by the outside contractor and Census Bureau staff were selected to represent potentially hard-to-enumerate groups. The national sample will provide results that are more closely representative of the quality of form completion among the general public. It also will provide information concerning mailback rates of the alternative questionnaires.

Completing the Questionnaire

Our tests related to questionnaire wording and design are part of our long commitment at the Census Bureau to questionnaire research. If we are going to take a self-enumerating census by mail and collect all the data that the Nation needs, a large segment of the public must be able to complete the questionnaire.

We converted to the use of mail census methods for most of the country in the 1970 census. We were realistic enough then, and are now, to know that not every household would have an adult capable of filling a questionnaire accurately and completely. We acknowledge that for many people, filling the census questionnaire can be challenging. Those who cannot read well, or at all; who read only a foreign language; who have disabilities that prevent them from reading or understanding printed materials; or who have no one else in the household, in their family, or among their friends who can help them fill the questionnaire--these persons will not be able, even if willing, to complete and return the questionnaire. And we are aware that some of the subjects we cover in the census, such as income or mortgages, might seem complicated even to people who do read well.

I want to emphasize that a person's being unable to fill the questionnaire does not mean that he or she will not be counted. We have built into the census plan procedures and programs to deal with these problems: telephone and walk-in questionnaire assistance centers, foreign language questionnaires and translation guides, household visits by census enumerators, and so on. In addition, we enumerate persons living in group quarters (nursing homes, military barracks, and so on) by personal visit.

Still, it is appropriate to ask, and we do ask, "Is the questionnaire too hard to fill out?" There is no scientific yardstick to measure the reading level of the census questionnaire. We have used standard readability formulas to guide our writing of the training packages for temporary field personnel; but, for a number of reasons, these formulas are not suitable for use in determining the reading level of the census questionnaire. There are many formulas that would produce varying results; they were all designed primarily for measuring the level of elementary school texts; they work well only for larger texts (not for short census questions); and they cannot measure other factors relevant to reading comprehension, such as familiarity with the subject, writing style, and format and layout of the text. Still, we believe that reading formulas do have useful applications, and we are continuing to investigate other ways we can use them.

We do have some measures--such as mail-return rates, item nonresponse rates, data consistency rates, followup workloads, and in-depth observations--that tell us where we have problems. Our experience is that mail-return

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rates have been high--83 percent for 1980--and data quality has been reasonably good. But we continue to work to improve them and our research on questionnaire design is part of that effort.

DATA PRODUCTS

The fourth subject I will discuss is the data products for the 1990 census. Producing and disseminating data products are the culmination of a successful census.

Planning the Products

I will begin by describing briefly our process for planning the 1990 data products, which has been underway for some time. In 1982, we began an internal appraisal of the 1980 census data dissemination program. In 1982-1983, the National Conference of State Legislatures (NCSL) surveyed state legislative officials regarding the 1980 census P. L. 94-171 (redistricting) computer tapes, microfiche, and paper printouts. In October 1983, the Census Bureau held a national conference of state officials and minority group members to discuss the P. L. 94-171 program and the NCSL survey results.

In April 1984, we held a National Geographic Areas Conference to examine our approach to the definition, delineation, and recognition of geographic areas in the 1980 census and how these activities should change for the 1990 census.

In October and November of 1984 we held three Regional Geographic Areas Conferences to share the results of the National Conference with a wider

audience and to gather additional information on these fundamental units for data tabulation.

In the period 1984-1985, as I mentioned earlier, we held 65 Local Public Meetings. Also in this period, the State Data Centers, state government agencies, and regional and local planning organizations provided comments on their use of 1980 data products and their recommendations for 1990. We held regional meetings with American Indians and Alaska Natives to obtain their suggestions and held community meetings with Hispanic, Black, and Asian and Pacific Islander groups to collect similar recommendations. We have also discussed our plans with professional organizations and census advisory committees, and have consulted Federal agencies to learn their needs for data products.

During April and May of 1986, we conducted a series of 10 regional product planning meetings around the country. In November 1986 we held a conference to present our final report on the product meetings. Based on the thousands of recommendations we received in earlier meetings, we developed proposals for 100-percent and sample products for discussion in these meetings.

Preliminary Decisions and Goals

We have reached a number of preliminary decisions about the 1990 census data products and we will announce our final plans in the late fall or early winter. The law requires that we release data for use in apportioning seats in the House of Representatives by December 31, 1990; and it requires that we release data by April 1, 1991, for use in drawing Congressional and other

legislative district boundaries. All of our census plans are geared to meeting these required dates for the 1990 census, as we did for 1980.

One of our major goals for 1990 has been to expedite the release of other data products. We tentatively plan to begin the release of standard 100 percent data products in the Spring of 1991 and complete the release of these products 6 to 11 months earlier than for comparable 1980 products. We tentatively plan to begin the release of standard sample data products in early 1992 and complete the release of these products 10 to 24 months earlier than for 1980. The earlier release of data products is made possible by several factors: (1) We started planning earlier than for the 1980 census, (2) we have given more emphasis to data products in our planning (including the development of key data products as part of the Dress Rehearsal), (3) we plan to convert questionnaire data into computer-readable format on a flow basis, concurrently with data collection and several months earlier than for 1990, (4) we are proposing changes in the publications that will speed their release (I will discuss some of these changes a little later), and (5) we will use a new tabulation/publication system that will reduce the time it takes to review products and makes their production more efficient.

At this time, we propose that computer summary tapes, printed reports, and microfiche will be the primary means for distributing 1990 census data, as they were for 1980. Computer summary tapes are a way to provide a substantial amount of data fairly inexpensively. Data are usually available in more geographic and subject-matter detail on computer summary tapes than on any other medium. However, using tapes requires technical

skill on the part of the user as well as an investment in both hardware and software.

Printed reports are an essential medium of data dissemination. While access to computers continues to grow, the Census Bureau is committed to making data available to all segments of the population. The printed reports, available through the Government Printing Office and libraries, make this possible. A survey of private sector users conducted by American Demographics showed that many of their census data needs are best met by printed reports. In our planning meetings, data users expressed strong support for printed reports.

Data users also expressed support for microfiche. Microfiche is a compact and relatively inexpensive way of making a large amount of data available in "eye-readable" form. Thus, we plan to make selected summary tape files and block statistics available on microfiche. In 1970 and earlier censuses, block statistics were issued in printed reports. In 1980, however, the number of blocks covered in the series increased to 2.5 million and printed reports would have been too costly to produce and too cumbersome to store. So we issued the statistics on microfiche. For 1990, we may have as many as 11 to 12 million blocks, since we plan to delineate blocks for the entire country. Printed reports for these would be even more costly and cumbersome than in 1980, so we again will plan to use microfiche.

We also evaluated other dissemination media for making data available, including flexible diskettes for microcomputers, laser disks, and on-line data systems. We expect to use these media on a limited basis in 1990.

They are likely to be available to users after the data products have been released in the regular media. Depending on the results of the 1990 program, we may expand their use for the 2000 census.

Other Proposals

We are exploring other potential new initiatives as a means to disseminate data to users, and I will discuss one of these briefly--user-defined tabulations. We are exploring the feasibility of developing a program to produce data, on a cost-reimbursable basis, for special geographic areas defined by users. We will develop a set of standardized tables that can be used to provide data for different geographic areas. Such a generalized tabulation program could meet the needs of a wide range of small-area data users, including those who want data for neighborhoods. Geographic areas would be defined in terms of whole blocks that could be aggregated.

We are proposing a number of changes in the format and sequencing of 1990 data products to help us meet our goal of providing quality products rapidly. For example, we are proposing that the earliest products from the census exclude those statistical areas that will be defined on the basis of 1990 census results. These nongovernmental entities are metropolitan statistical areas and urbanized areas. Including data for these areas could delay the production of the first series of products. By including data for these areas in later products, we can provide data for census blocks, census tracts, incorporated places, counties, and states earlier than for the 1980 census.

For the same reason, we are also proposing that we limit the amount of historical data in the initial release and concentrate most historical data in a special series to be issued later. Since 1990 marks the bicentennial of the census in the United States, a special presentation emphasizing historical data would be particularly appropriate. Preparation of historical counts and data for inclusion in the early printed products added to the work load and created logistical complexities that resulted in delays in 1980. Users have commented frequently on the need for data from prior censuses so that comparisons of data items can be made over time; however, they agreed wholeheartedly to our proposal to give first priority to the release of standard 1990 census products.

Many 1980 census printed reports were much larger than their 1970 counterparts, at least partially because of the decision to publish much more data for race and Spanish origin. We published extensive data for the major race groups (that is, White; Black; American Indian, Eskimo, and Aleut; and Asian and Pacific Islander) and for the Spanish origin population. In our planning meetings, we asked data users whether the amount of data needed by race and Spanish origin could be reduced in the 1990 reports; most preferred that we not reduce the amount of race or Spanish origin detail. We plan to tabulate and publish as much data for race and Spanish origin groups as in 1980. These data also will be available in the summary tapes.

Finally, I will mention that we are considering changes to both the computer summary files and the printed reports that show the most detailed

crosstabulations of population and housing data. Again, we are considering this based on user recommendations. Plans are to combine these computer files and reports with our other special files and subject reports in a more concise format that will allow us to expedite the data to users. We also plan to develop, as in previous censuses, public-use microdata samples that would allow users to do their own detailed cross-tabulations for large geographic areas. Any data needs that cannot be met through our planned data products, can be met through our special tabulations program, which is available to data users on a cost reimbursable basis.

CLOSING COMMENT

Family of Minicomputers

Now I will give you an update on our "family of minicomputers" procurement. The "family of minicomputers" contract will provide minicomputers of varying capacities for our 11 processing offices, 12 regional census centers, 1 regional suboffice, and 450 or so district offices. This contract is vital because it will provide support for our address control file, questionnaire check-in, key entry, and management information system.

At the hearing on March 12, I reported that we had received a protest and an agency appeal to the "family" contract and that an appeals judge had enjoined us from proceeding with procurement.

I am pleased to report that shortly thereafter we reached an agreement with the protesting companies and the "family of minicomputers" contract is back on schedule. To avoid delays and to assure that this vital equipment is

available for the census, we agreed to pay their costs for preparing proposals and legal fees associated with the protest. In return, they agreed to withdraw their protest and drop out of the procurement process on this contract.

We expect to award the "family" contract on schedule this month and to carry through with our Dress Rehearsal automation plans.

Mr. Chairman, that concludes my testimony.

Background material provided by the Census Bureau on the questionnaire subjects proposed for the 1990 Census of Population and Housing:

ITEM: Income in 1989

QUESTIONS: 32a-h and 33. The types of income in Question 32a-h include wages and salary; nonfarm and farm self-employment; interest and dividends, Social Security; public assistance; and all other money income received regularly. Question 33 asks for a total income amount.

USERS: Many Federal agencies, state and local governments, business organizations, the academic community, and the general public.

USES: Various Federal agencies such as the Department of Labor, Department of the Treasury, and Department of Housing and Urban Development will require the 1990 income and derivative poverty statistics to fulfill requirements for such legislation as Job Training Partnership Act (29 U.S.C. 1572(a)), Tax Equity and Fiscal Responsibility Act (26 U.S.C. 103A), Community Development Block Grants (42 U.S.C. 5301-5303, 5306B), Urban Development Action Grants (42 U.S.C. 5317). Type of income information is used by a number of Federal agencies for program and policy evaluation.

State and local governments will need these statistics to help develop social programs in low income areas and to evaluate regional, state, or urban development policies. Business organizations utilize this information to formulate marketing plans. The academic community and the general public use these data to satisfy their research needs.

DATA PRODUCTS: Household and family income data, per capita income, and selected type of income statistics will be published for states, counties, places, and census tracts. Similar summary tape file data will be available on microfiche for zip codes, census block groups, and enumeration districts. Limited cross tabulations of income data by other population characteristics such as age of householder, type of family, etc., will be included in the summary tape file. A decision has not been reached on the development of a special income tape file.

Item: Work Experience

Questions: Persons 15 years and over will be asked whether they worked at all in 1989, and, if so, how many weeks and how many hours per week they worked.

Users:
Uses: } The work experience item serves to qualify the data from the "income in 1989" item, allowing analysts to control for differences in work inputs when making earnings comparisons among various groups of persons. Thus, the users and uses of the work experience item are the same as those for the income item.

Data Products: Data on the number of workers by weeks and usual hours worked per week will be presented in printed reports and on computer tapes by demographic characteristics such as age, race, and sex, down to the census tract level.

Item: Farm residence

Questions: Farm residence is determined by a question on farm sales. Farms are defined as places which had $1,000 or more of agricultural sales during the preceding year. The sales question is preceded by a question which screens out houses on less than one acre of land. The screener is used in order to reduce the number of households questioned about farm sales.

Users: Federal users of farm residence data include the Department of Agriculture's Federal Extension Service, Agricultural Experiment Stations, Rural Development Research, and 1890 Land-Grant Colleges. State users include rural and agricultural researchers at state agriculture and planning agencies and universities. Other users include students, the press, and publishers of rural and agricultural magazines.

Uses: The Department of Agriculture uses state and county level counts of farm residents in the allocation of funds, in the determination of program eligibility, in program administration, and in evaluation activities. Other users are also interested in changes in numbers of farm residents in different parts of the country and in addition they tend to focus on the social and economic characteristics of farm residents in their local area, state, or region.

Data Products: Printed reports and summary tape files at the county, state, region, and national level.

Item: Household Relationship

Question(s): How individuals in the household are related or not related to the householder; for example, husband/wife, natural-born or adopted son/daughter, paid employee, etc.

Users: Department of Health and Human Services
Department of Housing and Urban Development
Department of Education
State and local government agencies

Uses: To implement Federal, State, and local programs and used to assist in Federal program/policy evaluation.

Required for operational purposes to implement Decennial Census, to code presence and nature of families, to calculate poverty statistics, etc.

Primary uses involve all statistics calculated by household or family types, which includes virtually all additional variables included in the Decennial Census.

Data Products: Printed reports to the tract level.
Summary tape files at the block group.

Item: Sex

Question(s): Male or female?

Users: Department of Health and Human Services
Department of Labor
Department of Education
Civil Rights Commission
State and local governments

Uses: To implement Federal, State, and local programs and used to assist in Federal program/policy evaluation.

Required for operational purposes to implement Decennial Census, to code presence and nature of families, to calculate poverty statistics, to determine sex ratios in demographic and economic contexts, etc.

Primary uses involve all statistics calculated by household or family types, and virtually all additional variables included in the Decennial Census.

Data Products: Printed reports to the tract level.
Summary tape files at the block group.

Item: Race

In the 1990 census, respondents will be asked to classify themselves into one of the prescribed major race categories--White, Black or Negro, Asian or Pacific Islander, American Indian, Eskimo, or Aleut--or the "Other" race category. For the Asian or Pacific Islander, American Indian, and Other race categories, individuals will not only have to mark the appropriate circle but provide a write-in entry. If the person responds as "Asian or Pacific Islander" they will be asked to print the name of the group (i.e., Chinese, Filipino, Hawaiian, Vietnamese and so forth). If the person responds as "American Indian," they will be asked to report the name of their enrolled or principal tribe. If the person responds as "Other race," they will be asked to provide the group.

Users:

Federal, state and local governments. Economist, historian, sociologist, and other academicians as well as private organizations, and community groups.

Uses:

Federal program uses--Census data on race provides the basis for much Federal legislation and its implementation. Examples include the Voting Rights Act, Amendments to the 1982 Bilingual Education Act, Federal Equal Opportunity Recruitement Programs and the Job Partnership Training Act. Programs dealing with the rights and needs of American Indians are dependent upon small-area racial data from the census. With such information, the Federal government can determine the need for new programs and changes in existing programs for different racial groups.

State and local government uses--State and local governments use racial data to cooperate in the implementation of affirmative action and other Federal programs and to assess compliance with their requirements. For example, many states have enacted their own laws to comply with provisions in the Voting Rights Act and state laws regarding redistricting.

Other uses--Economist, historian, sociologist, and other academicians find racial figures essential to their studies and research. Ethnic and other interest groups need the data to assist them in interpreting and analyzing social and economic changes in the community and to document program proposals. Racial data for tracts and blocks are used by local groups, such as community action and citizens groups, to plan and obtain funds for playgrounds, day-care centers, and housing improvements.

Data Products:

Complete Count Data Products--For the 1990 census publications and summary tape files based on 100-percent tabulations, our tentative plans are to provide counts and general characteristics for the major race groups--White, Black, American Indian, Eskimo, or Aleut, Asian or Pacific Islander, and Other. We will present these data for varying geographical levels such as state, counties, places, tracts, and block groups.

Sample Data Products--For our sample data products, we propose to present data for the major race groups as well as for the detailed racial groups such as Chinese, Filipino, Korean, Hawaiian, Samoan, and Vietnamese. We will be consulting with data users on the appropriate geographical levels to be shown in our printed reports and in our summary tape files.

Item:	Age
Questions:	Age at last birthday and year of birth
Users:	Department of Health and Human Services Department of Justice Department of Education State and local government agencies and private sector data users
Uses:	The Older Americans Act of 1965, as amended; the Voting Rights Act-Amendments of 1982; and the Vocational Education Act of 1963 are several uses of decennial age data. Age is also used to implement other Federal, state, and local programs. Age is also required for operational purposes to implement many decennial census operations, including coverage measurement evaluations.
Data Products:	Printed reports to the tract level Summary tape files and the P.L. 94-171 tapes at the block level. Proposed specialialized tape files or microdata products-- older population

Item: Marital Status

Question(s): Current marital status; now married, separated, widowed, divorced, or never married.

Users: Department of Health and Human Services
Department of Labor
State and local governments

Uses: To implement Federal, State, and local programs and used to assist in Federal program/policy evaluation.

Required for operational purposes to implement Decennial Census, to code presence and nature of families, to calculate poverty statistics, etc.

Primary uses involve all statistics calculated by household or family types, which includes virtually all additional variables included in the Decennial Census.

Data Products: Printed reports to the tract level.
Summary tape files at the block group.

Item: Spanish/Hispanic Origin

Question(s): This question asks persons if they are of Spanish/Hispanic origin and it allows for identification of each type of Spanish/Hispanic origin, e.g., Mexican, Puerto Rican, Cuban, etc.

Users:

1. Federal - Departments of Health and Human Services, Justice, Housing and Urban Development, and Defense, among others.
2. State and local - State legislatures and social service organizations.
3. Other - Scholars, business and Hispanic ethnic organizations.

Uses:

1. Redistricting
2. Implementation of Voting Rights Act and provisions of laws prohibiting discrimination based on age, race, color or natural original in Federally assisted programs.
3. Determination of Hispanic origin persons for bilingual education programs, health assistance programs, and for use with vital statistics data.
4. Enforcement of fair housing programs and mortgage lending policy programs.
5. Analysis of the social and economic mobility of Hispanic groups and assimilation of immigrant groups.

Data Products:

1. Printed reports (or microfiche) with geographic detail down to the block level for 100-percent data and down to the tract level for sample data.
2. Summary tape files with geographic detail down to the block level for 100-percent data and down to the block-group level for sample data.
3. Data from this question will be included on many specialized files such as the public-use microdata file.

Item: School enrollment

Question: Ascertain whether each person is enrolled in a regular school --public or private

Users: Federal government
Other - academic private and government researchers

Uses: Required to implement existing Federal programs: State Vocational Education Programs [20 U.S.C. 2306(a)(5)(B)], Bilingual Education Act [20 U.S.C. 3222], Adult Education Act [20 U.S.C. 1201 et.seq.], Basic Education for Adults [20 U.S.C. 1204(a)(2)].

Planning, report and enforcement uses at the Federal level: Job Training Partnership Act [29 U.S.C. 1514(b) and 1516(e)], Civil Rights Act of 1964 as amended [42 U.S.C. 2000d], National Institute of Education [20 U.S.C. 1221e(b)(2)(C)], Women's Educational Equity Act [20 U.S.C. 3341], Center for Education Statistics [20 U.S.C. 1221(e)-(1)].

Academic, private and governmental research uses: geographic distribution of households with children in public and private schools for survey sample construction; significant variable in social and economic research as a characteristic of children and adults and an alternative to labor force participation; contributes to the measure of school dropouts and unemployment rates; local government arguments for fund applications based on college student population. May be needed if tuition tax credit for private school enrollment becomes an issue again.

Data Products: Printed reports with geographic detail at the tract and higher levels.

Printed report with substantial substantive detail including school enrollment and other social and economic characteristics at the large SMSA, State and national levels.

Summary tape files with geographic detail at the block group and higher levels.

Other special purpose tape files such as school district tape file, public use sample microdata tape files.

Item: Educational attainment

Question: Highest grade or level of school completed, including academic post-secondary degrees

Users: Federal government
State government
Other - academic private and government researchers

Uses: Fulfill legal requirements: Voting Rights Act amendments of 1982 [42 U.S.C. 1973(aa)-(1a)], Older Americans Act [42 U.S.C. 3001]

Required to implement existing Federal programs: State Vocational Education Programs [20 U.S.C. 2306(a)(5)(B)], Adult Education Act [20 U.S.C. 1201 et.seq.], Work-Study Program [42 U.S.C. 2752(b)], Basic Education for Adults [20 U.S.C. 1204(a)(2) and 1205(b)(1)(4)(12)], Job Training Partnership Act [29 U.S.C. 1514(b) and 1516(e)], National Science Foundation [42 U.S.C. 1862(3)(a)(6)].

Within State allocation of funds under various Federal programs

Planning, report and enforcement uses at the Federal level: Executive Order 12049 (Department of Defense)

Academic, private and governmental research uses: schooling completed is a fundamental socioeconomic characteristic and is used as a basic descriptor in analysis of local, state, and national populations.

Data Products: Printed reports with geographic detail at the tract and higher levels.

Printed report with substantial substantive detail including educational attainment and other social and economic characteristics at the large SMSA, State and national level.

Summary tape files with geographic detail at the block group and higher levels.

Other special purpose tape files such as school district tape file, EEO file, public use sample microdata tape files.

Item: Place of birth

Question: Asks for State of birth for the native-born and country of birth for the foreign-born

Users:
- (Federal) Civil Rights Commission
- Department of Commerce, Bureau of the Census
- Department of Education
- Department of Health and Human Services
- Department of Justice
- (State) State planning offices
- (Local) Local planning offices
- (Other) Geneological researchers
- Individuals

Uses:
- The Civil Rights Commission uses the data as a baseline in determining discrimination because of national origin.
- The Department of Commerce, Bureau of the Census, uses the data for coverage evaluation through demographic analysis.
- The Department of Education uses the data to allocate funds to States for programs to access post-secondary educational opportunities for adults and to determine where it is appropriate to establish bilingual education programs for children.
- The Department of Health and Human Services, Office of Refugee Resettlement, uses the data to locate areas with refugee populations in order to provide assistance in achieving economic self-sufficiency.
- The Department of Health and Human Services also uses the data to assess the expected impact of proposed legislation to reform immigration policy (such as the Simpson/Massoli Immigration Reform Act).
- The Department of Justice uses the data to analyze and report on those seeking citizenship by nationality.
- State and local planners use the data to determine needs for schools, medical and nursing facilities, and economic and social services.
- Researchers use the data for tracing geneological lines.
- Individuals use the data for proof of age for social security claims or for proof of citizenship if a birth certificate is not available.

Data Products: Printed reports with geographic detail at the tract level; summary tape files with geographic detail at the block-group level; public use microdata files with detail at the county-group level.

Item: Citizenship

Question(s): This question asks persons to indicate whether they are native-born or naturalized citizens of the United States or whether they are not U.S. citizens.

Users:
1. Federal - Department of Health and Human Services; United States Commission on Civil Rights; Department of Justice.
2. State and local - localities affected by large numbers of immigrants and foreign nationals
3. Other - Scholars, business organizations.

Uses:
1. Implement provisions of the Voting Rights Act; Refugee Assistance Act of 1980 as amended; Bilingual Education Act.
2. Used to measure social and economic status of foreign born persons for allocating benefits under specified Federal programs.

Data Products:

1. Printed reports with geographic detail at the State and place levels.
2. Summary tape files with geographic detail at the U.S. State, place, and tract levels.
3. Data from this question will be included on some specialized data files such as the public-use microdata files.

Item: Year of Entry

Question(s): This question asks all persons who were not born in the United States (50 States and the District of Columbia) to select the period of entry during which the person came to the United States to stay.

Users:
1. Federal - Department of Health and Human Services, U.S. Commission on Civil Rights, Department of Justice-Immigration and Naturalization Service
2. State and local - localities affected by large numbers of immigrants and foreign nationals.
3. Other - Scholars, business organizations.

Uses:
1. Implement provisions of the Refugee Assistance Act of 1980; Refugee Assistance Ammendments of 1982; Civil Rights Act; and the Social Security Act.
2. Provide information for policy development.

Data Products:

1. Printed reports with geographic detail at the State and place levels.
2. Summary tape files with geographic detail at the U.S. State, place, and tract levels.
3. Data from this question will be included on some specialized data files such as the public-use microdata files.

Item: Ancestry

Question(s): The question is worded "What is this person's ancestry or ethnic origin?" The question is open-ended and based on self-identification. Persons may report their ancestry group regardless of the number of generations removed from their country of origin.

Users:
1. Federal - Civil Rights Commission (CRC); Department of Health and Human Services (HHS); Minority Business Development Agency (MBDA); Department of Housing and Urban Developing (HUD); Equal Employment Opportunity Commission (EEOC); Department of Justice (DOJ); National Center for Health Statistics (NCHS)
2. State and local governments
3. Other - Scholars, business and ethnic organization.

Uses:
1. CRC - Studies denial of equal protection of ethnic groups and research voting and voting registration (Civil Rights Act of 1964, as amended, and Voting Rights Act and amendments of 1982).
2. HHS - Assess refugee population and secondary migration data on refugees by the Office of Refugee Resettlement and conducts research on welfare dependency in aim to reduce dependency rates in Social Security Act programs. (Refugee Assistance Act of 1980, as amended, and Social Security Act).
3. MBDA - Uses data to determine ethnic groups eligible for minority business assistance (Presidential Executive Order 11625).
4. State and local governments and private organizations need ancestry data to identify ethnic groups' needs for social services and to plan and implement education, housing, health, etc., programs and to address the needs of these ethnic groups.

Data Products:
1. Printed reports with geographic detail at the state, place, county and tract level.
2. Summary tape files with geographic data down to the tract level.
3. Data from this question will be included on some specialized data files such as the public-use microdata files.

Item: Language spoken at home and English ability

Question: Ascertain English ability for persons who currently speak a language other than English at home

Users: Federal government
State governments
Other - academic private and government researchers

Uses: Fulfill legal requirements: Voting Rights Act amendments of 1982 [42 U.S.C. 1973(aa)-(1a)], Older Americans Act [42 U.S.C. 3001]

Required to implement existing Federal programs: Vocational Education Act [20 U.S.C. 2301], Bilingual Education Act [20 U.S.C. 3221-3262], Refugee Act of 1980 and amendments of 1982 [8 U.S.C. 1521-1523], [15 U.S.C. 1516(a)] requires several departments to collect statistics relating to social, health, and economic condition of Americans of Spanish origin or descent, Civil Rights Act of 1964 [42 U.S.C. 2000d].

Required to implement existing State programs: Adult Education Act [20 U.S.C. 1201], State Vocational Education Programs [20 U.S.C. 2310(b)(2)].

Planning, report and enforcement uses at the Federal level: Older Americans Community Service Employment program [42 U.S.C. 3056(b)(1)(M)], National Institute of Education [20 U.S.C. 1221e (b)(2)(C)].

Academic, private and governmental research uses: size of the population whose access to health and social services and ability to exercise civil rights may be limited by language ability.

Data Products: Printed reports with geographic detail at the tract and higher levels.

Printed report with substantial substantive detail including language, English ability and other social and economic characteristics at the large SMSA, State and national level.

Summary tape files with geographic detail at the block group and higher levels.

Other special purpose tape files such as school district tape file, public use sample microdata tape files.

Item: Migration

Question: Asks for foreign country or State, county, and place of residence 5 years prior to the census date.

Users: (Federal) Department of Agriculture
Department of Commerce, Bureau of the Census
Department of Commerce, Economic Development Administration
Department of Education, Office of Bilingual Education
Department of Health and Human Services, Office of Refugee Resettlement
Department of Housing and Urban Development
Department of Transportation
Veterans Administration
(State) State planning offices
(Local) Local planning offices
(Other) Academicians, researchers, news media, etc.

Uses: The Department of Agriculture, Economic Research Service uses the data in ongoing research and analysis of the growth and decline of rural areas. Used in conjunction with residential location at the time of the census and State of birth, this question helps determine the extent of residential mobility and to identify internal migration movements.
The Bureau of the Census uses the data in evaluating the accuracy of the census count.
The Economic Development Administration uses the data in identifying communities that are eligible for redevelopment.
The Office of Bilingual Education uses the data for future planning for the location of bilingual education programs.
The Office of Refugee Resettlement uses the data for the allocation of funds in providing assistance to refugees.
The Department of Housing and Urban Development uses the data to identify areas that qualify for community development programs.
The Department of Transportation uses the data in making grants for highway improvements.
The Veterans Administration uses the data in estimating and projecting future needs and locations for veterans' facilities.
State and local planners use the data to determine needs for schools, medical and nursing facilities, and economic and social services.
Others use the data in the analysis of the number and characteristics of persons moving to and from various geographic areas.

Data Products: Printed reports with geographic detail to the tract level; summary tape files with geographic detail to the block-group level; public use microdata files at the county-group level; specialized tape files including State-to-State and county-to-county migration flow files.

Item:	Disability
Questions:	• Questions on work disability --whether limited in ability to work or prevented from working • Questions on mobility limitations --whether there is a need for assistance with activities outside and inside the home
Users:	Department of Health and Human Services Department of Housing and Urban Development Department of Transportation Department of Education State and local government agencies data users
Uses:	Implementation of programs related to rehabilitation services, vocational education, and anti-discrimination activities (29 USC 761, 781, 721, 750, 714, 795--DOEducation) as well as determination of medical services for veterans (38 USC 5010--Veterans' Administration) and transporation funding for local areas and states (23 USC 142; 49 USC 1612--Department of Transportation). Information used in programs providing grants for services to older and disabled persons (42 USC 3038--Health and Human Services) and determination of housing needs for disabled and older persons (12 USC 1701--Housing and Urban Development). Disability data are a basic socioeconomic measure related to income, job loss, and under-employment. Disability data are measures of the changes in society based on the aging of the population and changes in living arrangements for the disabled and mentally ill.
Data Products:	Printed reports to the tract level Summary tape files at the block group level.

FERTILITY

Data uses and users:

At a time when the Nation's fertility has been below replacement for more than a decade and when there are still large differences in the birth rate among the diverse groups of the population, it is especially desirable to obtain accurate information on reproduction. The children ever born question proposed for inclusion in the 1990 census is ideal for this purpose; it enables researchers to trace past fertility experience among different age groups of women and allows for analysis of current fertility differences.

This information is invaluable for Federal legislators when examining needs for family planning assistance to states in order to more efficiently distribute Federal funds. Looking ahead, Federal agencies whose mission is to assess long term environmental and occupational health issues will need to measure fertility levels among different segments of society to ascertain if there are any adverse reproductive effects. The decennial census would be the only instrument which would have a large enough sample to examine these issues for very detailed occupational groups and specific geographical areas.

Fertility data are also employed by local governments on a neighborhood basis for maternal and child welfare planning. In light of the continually increasing entry of young women into the labor force, more accurate information on fertility levels among women in different socioeconomic groups is required to effectively plan for community needs for child care centers for working women. In many large cities with immigrant populations, estimates of the fertility of the foreign born are critical for estimating potential future demands placed on local educational systems for servicing the educational needs of parents with young children.

Data Products:

In order to accommodate the requirements of local data users, the fertility question needs to be included on summary data tapes down to the tract level. Printed reports should also include these data at the tract level along with a special report on fertility at the national level showing detailed occupational and industrial characteristics of women.

Item: Veteran Status

Question (s): Persons 15 years and over will be asked whether they have ever served in the active U.S. Armed Forces, military Reserves, or National Guard. Persons who served on active duty in the Armed Forces will be asked to specify the period(s) in which they served and their total time in service.

Users: Federal users include the Veterans Administration and the Department of Defense.

Uses: The Veterans Administration (VA) will use the data as the baseline from which they will make the veteran population projections they must prepare down to the county level for planning purposes. Veteran population estimates are used throughout the VA to plan for future medical care demands, to administer many specialized outreach and employment programs for veterans, and to report to Congress on the needs of selected groups of veterans, such as Vietnam-era and women veterans.

The Department of Defense will use the data to study the effects of military service on post-service earnings.

Data Products: Both printed reports and computer tape files will present tabulations of veteran status, by period of service, by demographic characteristics such as age, sex, and race.

Item: Employment and Unemployment

Questions: Persons 15 years and over will be asked whether they worked at all during the week prior to enumeration. If so, they will be asked how many hours they worked at all jobs; if not, they will be asked whether they were temporarily away from a job, looking for a job and available to take one, or not in the job market.

Users: Federal users include the Department of Labor, Department of Commerce, and the Equal Employment Opportunity Commission.

Uses: Census employment data are the only source of accurate employment and unemployment estimates for small areas. They are widely used as benchmarks in the procedures used to make timely estimates of the labor force for small areas. These estimates are used by the Labor and Commerce Departments to allocate funds and administer programs under the Job Training Partnership Act and the Public Works and Economic Development Act. The Equal Employment Opportunity Commission and Department of Labor use the data for monitoring affirmative action programs and in the enforcement of anti-discrimination legislation.

States will use the census data as benchmarks in their labor market supply and demand information systems.

Census employment data will also be used to set meaningful universes for the "Place of Work and Commuting to Work" and the "Occupation, Industry, and Class of Worker" items.

Data Products: Employment status by demographic characteristics such as age, sex, and race will be presented in printed reports and computer tapes down to the tract level.

Items: Occupation, industry, and class of worker

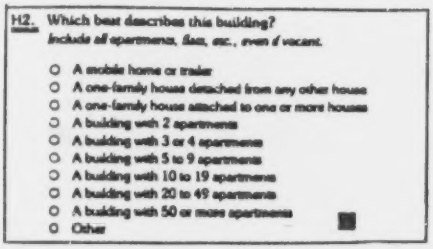
Questions: We ask employed people to describe three characteristics of their jobs. These are the kind of business their employer or own company is engaged in, the kind of work (i.e. occupation) they do at that organization, and whether the organization is a private employer, a government, or one's own business. Unemployed persons and persons not currently in the labor force are asked to describe their last job if they worked in the last five years.

Users: Federal government, state and local governments, private industry, and academic researchers.

Uses: The Federal government uses these data to evaluate affirmative action and investigate discrimination in employment, to measure occupational supply, to measure employment in high skilled occupations and the characteristics of people in these occupations, and to develop industry and occupation projections. State and local governments use the data to determine needs for vocational education and other training programs, data on the economically disadvantaged, and for planning recruitment of industry. Private industry uses the data to determine their affirmative employment status, and to locate sites for new establishments or markets. Academic researchers use the data to study the characteristics of persons in occupations, and to study changes in the occupational and industrial mix over time.

Data Products: Printed reports that present summary industrial and occupational data for tracts, and places; detailed data for states and large metropolitan areas; and extensive demographic detail for the U.S. Similar data will be available on computer files. Special files and printed reports will be created to present EEO data.

Item: H2 UNITS IN STRUCTURE


H2. Which best describes this building?
Include all apartments, flats, etc., even if vacant.

- O A mobile home or trailer
- O A one-family house detached from any other house
- O A one-family house attached to one or more houses
- O A building with 2 apartments
- O A building with 3 or 4 apartments
- O A building with 5 to 9 apartments
- O A building with 10 to 19 apartments
- O A building with 20 to 49 apartments
- O A building with 50 or more apartments
- O Other

Provides the basic physical description of the housing inventory.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, Housing and Urban Development, and Justice
Federal Highway Administration
Federal Reserve Board
Federal Deposit Insurance Corporation
Federal Home Loan Bank Board

Other -

State goverments
Local governments

Uses: Preparation of reports submitted by the President, the Secretary of Agriculture, and the Secretary of Housing and Urban Development; analysis of housing for the elderly; analysis of national transportation policies and needs; analysis of how banking organizations meet the credit needs of their communities.

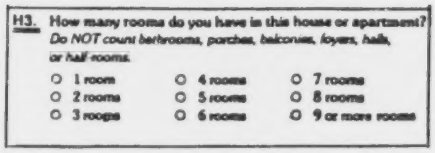
Drafting and revising zoning regulations; planning and estimating needs for extension of utilities; designing streets and parking facilities; determining police, fire protection, school, recreational area, and shopping center needs.

Define housing units and assure complete coverage of population and housing universes and provide benchmark data that make it possible to use the information in the sample questions.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H3 ROOMS



H3. How many rooms do you have in this house or apartment? *Do NOT count bathrooms, porches, balconies, foyers, halls, or half rooms.*

○ 1 room	○ 4 rooms	○ 7 rooms
○ 2 rooms	○ 5 rooms	○ 8 rooms
○ 3 rooms	○ 6 rooms	○ 9 or more rooms

Provides information on the amount of available living space and, together with number of persons, provides data on crowding.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, and Housing and Urban Development
Federal Home Loan Bank Board

Other -

State governments
Local planning agencies

Uses: In combination with number of persons, provides the persons per room data that are used to determine crowding. The extent of 1.01 or more persons per room is one of the factors used in the formula for allocation of funds and in determining areas eligible for grants for new construction and substantial rehabilitation; annual reports of the President to Congress; preparation of components of the national income and product accounts; calculation of home energy expenditures and consumption; analysis of the housing markets in which thrift institutions operate in terms of the demand for housing credit and the appropriateness of thrift operational polices to specific markets.

Measure of housing adequacy. When data on rooms are cross-classified with data on value, persons buying or selling homes, mortgage lenders, and others in the financial fields are provided with a basis for evaluating the cost of shelter.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H4 PLUMBING FACILITIES

H4. Do you have complete plumbing facilities in this house or apartment; that is, 1) hot and cold piped water, 2) a flush toilet, and 3) a bathtub or shower?

- o Yes, have all three facilities
- o No

This item is a basic indicator of housing adequacy.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, and Housing and Urban Development
Federal Highway Administration

Other -

State governments
Local governments

Uses: Federal fund allocation; annual reports of the President to Congress; preparation of components of the national income and product accounts; program planning, evaluation, and administration.

Identification of areas requiring rehabilitation or renewal; preparation of grant applications; monitoring and tracking success of government's housing activities.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H5 CONDOMINIUM STATUS

H5. Is this house or apartment part of a condominium?
○ No ○ Yes

This item provides information on a new form of homeownership.

Users: Federal -

Departments of Agriculture, Commerce, and Housing and Urban Development

Other -

State governments
Local governments

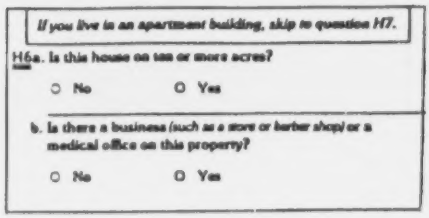
Uses: Preparation of the annual report of the President to Congress; preparation of components of the national income and product accounts; evaluation of current programs.

The data are used by state and local governments to determine the rate at which the rental housing inventory, especially the low rent units, are being lost due to conversion activity.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H6, H9 ACREAGE
BUSINESS OR MEDICAL OFFICE
VALUE



If you live in an apartment building, skip to question H7.

H6a. Is this house on ten or more acres?

○ No ○ Yes

b. Is there a business *(such as a store or barber shop)* or a medical office on this property?

○ No ○ Yes

H9. *Answer only if you OWN OR ARE BUYING this house or apartment —*
What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale?

○ Less than $10,000	○ $70,000 to $79,999
○ $10,000 to $14,999	○ $80,000 to $89,999
○ $15,000 to $19,999	○ $90,000 to $99,999
○ $20,000 to $24,999	○ $100,000 to $124,999
○ $25,000 to $29,999	○ $125,000 to $149,999
○ $30,000 to $34,999	○ $150,000 to $174,999
○ $35,000 to $39,999	○ $175,000 to $199,999
○ $40,000 to $44,999	○ $200,000 to $249,999
○ $45,000 to $49,999	○ $250,000 to $299,999
○ $50,000 to $54,999	○ $300,000 to $399,999
○ $55,000 to $59,999	○ $400,000 to $499,999
○ $60,000 to $69,999	○ $500,000 or more

Acreage and business or medical office are screening items used to identify the universe of housing for which value data are tabulated. Value of housing is an important economic indicator.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, Housing and Urban Development, Justice, and Labor
Federal Home Loan Bank Board
Advisory Committee on Intergovernmental Relations

Other -

State governments
Local governments
Private organizations

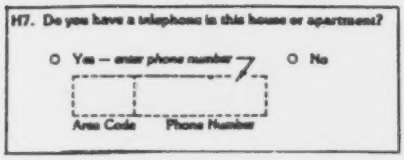
Uses: Preparation of components of the national income and product accounts; stratification and selection of the Consumer Price Index housing sample; program planning, evaluation, and administration; reports of the President to Congress; Congressional declaration of national housing policy.

Analyze local housing markets, measure the ability of local population groups to obtain affordable shelter.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H7 TELEPHONE



Presence of telephone in house or apartment and telephone number.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, and Justice.

Other -

State governments
Private organizations

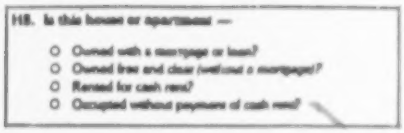
Uses: Planning and evaluation of programs for health, security, and assistance for the disabled and elderly.

Followup of failed edit cases by the Census Bureau during the Decennial Census to reduce the number of personal visits and thereby reduce cost of data collection.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H8 TENURE


H8. Is this house or apartment —

- O Owned with a mortgage or loan?
- O Owned free and clear (without a mortgage)?
- O Rented for cash rent?
- O Occupied without payment of cash rent?

Provide the count of owner-occupied and renter-occupied housing units, basic to most housing analysis. Provide the measure of the extent to which the goal of widespread homeownership is achieved.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, Defense, Housing and Urban Development, and Labor
Federal Home Loan Bank Board
Federal Reserve Board

Other -

State housing agencies
Local housing authorities
Planners, mortgage lenders, builders

Uses: Fund allocation; reports of the President to Congress; preparation of components of the national income and product accounts; program planning, administration and evaluation; stratification and selection of the Consumer Price Index housing sample; comparison of civilian and uniformed service members' housing costs.

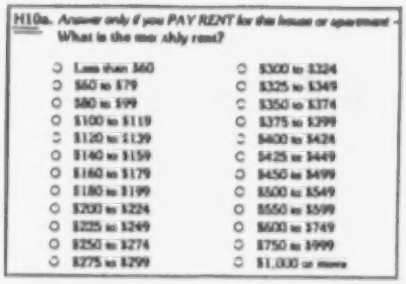
Assure complete coverage of population and housing universes and provide benchmark data that make it possible to use the information in the sample questions.

Planning, administering, and evaluating local housing strategies and programs.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H10a RENT



H10a. *Answer only if you PAY RENT for this house or apartment* — What is the monthly rent?

○ Less than $60	○ $300 to $324
○ $60 to $79	○ $325 to $349
○ $80 to $99	○ $350 to $374
○ $100 to $119	○ $375 to $399
○ $120 to $139	○ $400 to $424
○ $140 to $159	○ $425 to $449
○ $160 to $179	○ $450 to $499
○ $180 to $199	○ $500 to $549
○ $200 to $224	○ $550 to $599
○ $225 to $249	○ $600 to $749
○ $250 to $274	○ $750 to $999
○ $275 to $299	○ $1,000 or more

Provides a measure of basic housing cost.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, Defense, Housing and Urban Development, Labor, and Justice
Federal Home Loan Bank Board

Other -

State governments
Local housing authorities
Planners, builders

Uses: Fund allocation; reports of the President to Congress; preparation of components of the national income and product accounts; program planning, administration, and evaluation; stratification and selection of the Consumer Price Index housing sample; comparison of civilian and uniformed service members' housing costs.

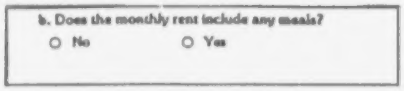
Assure complete coverage of population and housing universes and provide benchmark data that make it possible to use the information in the sample questions.

Planning, administering, and evaluating local housing strategies and programs.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H10b MEALS INCLUDED IN RENT



Identify housing units with meals included in rent separately from the rest of the renter distribution to provide a) a universe for further survey work, b) more information on the elderly and disabled, and c) cleaner rent statistics

Users: Federal -

Departments of Commerce, Health and Human Services, and Housing and Urban Development

Other -

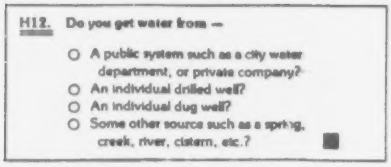
State governments
Local governments

Uses: Program planning, administration and evaluation for elderly and handicapped; computation of fair market rents; improvement of rent data; universe of housing for further surveys.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block numbering areas, and other political and statistical geography.

Item: H12 SOURCE OF WATER


H12. Do you get water from —

- O A public system such as a city water department, or private company?
- O An individual drilled well?
- O An individual dug well?
- O Some other source such as a spring, creek, river, cistern, etc.?

Provides information on the adequacy of the residential water supply and the identification of potentially unsafe sources.

Users: Federal -

Departments of Agriculture, Commerce, Housing and Urban Development, and Justice
Environmental Protection Agency

Other -

State governments
Local governments

Uses: Reports of the President to Congress; preparation of components of: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; determination of infrastructure need where non-municipal systems exist. Enforcement of various Civil Rights Acts; identification of target areas for residential rehabilitation loans; public facilities research; program evaluation and administration.

Identify housing which may be hazardous to the health and safety of the occupants; estimate need for facilities; plan new construction.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H13 SEWAGE DISPOSAL

H13. Is this building connected to a public sewer?

- ○ Yes, connected to public sewer
- ○ No, connected to septic tank or cesspool
- ○ No, use other means

Provides information on units with inadequate or potentially unhealthful sanitation.

Users: Federal -

Departments of Agriculture, Commerce, Housing and Urban Development, and Justice
Environmental Proctection Agency

Other -

State governments
Local governments

Uses: Reports of the President to Congress; preparation of components of: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; determination of infrastructure need where non-municipal systems exist. Enforcement of various Civil Rights Acts; identification of target areas for residential rehabilitation loans; program evaluation and administration.

Identify housing which may be hazardous to the health and safety of the occupants; estimate need for facilities; plan new construction.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H14 YEAR BUILT

H14. About when was this building or structure first built?

- O 1987 or 1988
- O 1980 to 1986
- O 1970 to 1979
- O 1960 to 1969
- O 1950 to 1959
- O 1940 to 1949
- O 1939 or earlier
- O Don't know

Identify age of the housing stock.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, and Housing and Urban Development,
Advisory Committee on Intergovernmental Relations
Consumer Products Safety Commission
Federal Home Loan Bank Board
Federal Reserve Board

Other -

State governments
Local governments
Construction firms

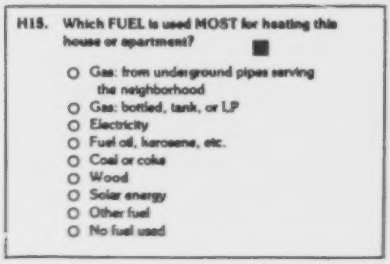
Uses: Fund allocation; regulation implementation; examination of Federal Savings and Loan Insurance Corporation insured institutions; preparation of components of the: a) national income and product accounts, b) regional economic accounts, c) pollution abatement and control expenditures; annual reports of the President to Congress; enforcement of various Civil Rights Acts; program planning, administration, and evaluation; research.

Identification of areas of growth and areas where rehabilitation of substantial renewal may be needed.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H15 HOUSE HEATING FUEL



H15. Which FUEL is used MOST for heating this house or apartment?

- O Gas: from underground pipes serving the neighborhood
- O Gas: bottled, tank, or LP
- O Electricity
- O Fuel oil, kerosene, etc.
- O Coal or coke
- O Wood
- O Solar energy
- O Other fuel
- O No fuel used

Determine the particular fuel used most to heat the living quarters.

Users: Federal -

Departments of Agriculture, Commerce, Energy, Health and Human Services, and Housing and Urban Development
Consumer Products Safety Commission

Other -

State governments
Local governments and planners
American Gas Association
Edison Electric Institute
Individual energy producers

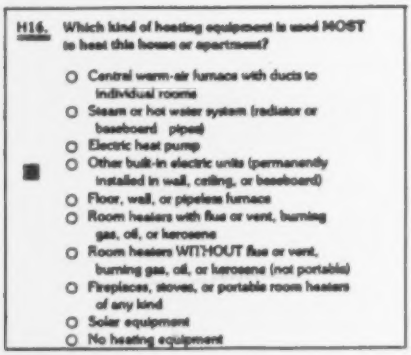
Uses: Energy assistance allocations; determination of relative safety of different fuels in conjunction with accident statistics; preparation of components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; stratification of counties in designing and updating sample for the Residential Energy Consumption Survey; annual report of the President to Congress; model making; research.

Determination of the need for additional facilities such as generating plants, long distance pipelines, and long distance transmission lines; measure of safety; measure of level of living; long range planning.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H16 HEATING EQUIPMENT


H16. Which kind of heating equipment is used MOST to heat this house or apartment?
O Central warm-air furnace with ducts to individual rooms
O Steam or hot water system (radiator or baseboard pipes)
O Electric heat pump
O Other built-in electric units (permanently installed in wall, ceiling, or baseboard)
O Floor, wall, or pipeless furnace
O Room heaters with flue or vent, burning gas, oil, or kerosene
O Room heaters WITHOUT flue or vent, burning gas, oil, or kerosene (not portable)
O Fireplaces, stoves, or portable room heaters of any kind
O Solar equipment
O No heating equipment

Determine the kind of heating equipment used most to heat the living quarters.

Users: Federal -

Departments of Agriculture, Commerce, Energy, Health and Human Services, and Housing and Urban Development
Consumer Products Safety Commission

Other -

State governments
Local governments and planners
American Gas Association
Edison Electric Institute
Individual energy producers

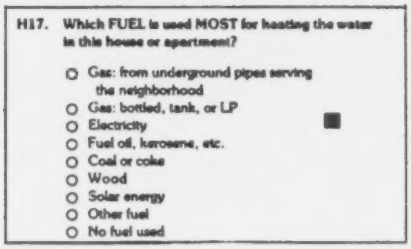
Uses: Energy assistance allocations; calculation of home energy expenditures and consumption; determination of relative safety of different types of heating equipment in conjunction with accident statistics; preparation of components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; program planning, administration, and evaluation; annual report of the President to Congress; model making; research.

Determination of the need for additional facilities such as generating plants, long distance pipelines, and long distance transmission lines; measure of safety; measure of level of living;; long range planning.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H17 WATER HEATING FUEL


H17. Which FUEL is used MOST for heating the water in this house or apartment?

- ○ Gas: from underground pipes serving the neighborhood
- ○ Gas: bottled, tank, or LP
- ○ Electricity
- ○ Fuel oil, kerosene, etc.
- ○ Coal or coke
- ○ Wood
- ○ Solar energy
- ○ Other fuel
- ○ No fuel used

Determine the fuel used most to heat the water in the living quarters.

Users: Federal -

Departments of Agriculture, Commerce, Energy, Health and Human Services, and Housing and Urban Development
Consumer Products Safety Commission

Other -

State governments
Local governments and planners
American Gas Association
Edison Electric Institute
Individual energy producers

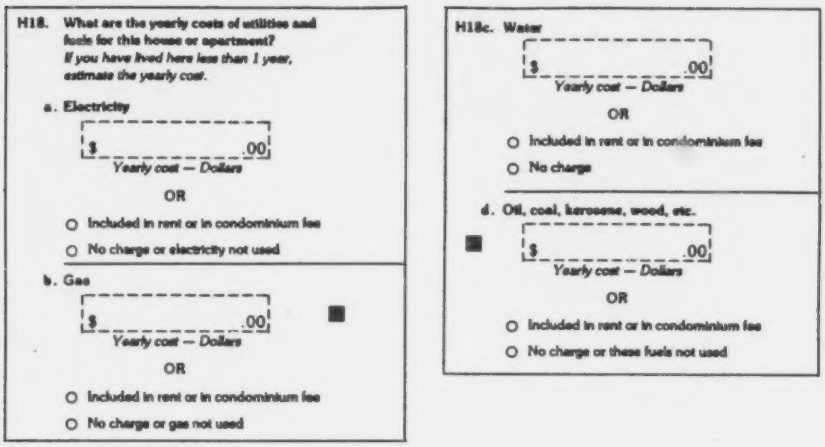
Uses: Fund allocation; determination of relative safety of different types of fuels in conjunction with accident statistics; preparation of components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; annual report of the President to Congress; model making; energy use and cost analysis.

Determination of the need for additional facilities such as generating plants.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H18 COST OF UTILITIES


H18. What are the yearly costs of utilities and fuels for this house or apartment? If you have lived here less than 1 year, estimate the yearly cost.
a. Electricity
$ .00
Yearly cost — Dollars
OR
Included in rent or in condominium fee
No charge or electricity not used
b. Gas
$ .00
Yearly cost — Dollars
OR
Included in rent or in condominium fee
No charge or gas not used
H18c. Water
$ .00
Yearly cost — Dollars
OR
Included in rent or in condominium fee
No charge
d. Oil, coal, kerosene, wood, etc.
$ .00
Yearly cost — Dollars
OR
Included in rent or in condominium fee
No charge or these fuels not used

Used in computation of shelter cost for homeowners and gross rent for renters.

Users: Federal -

Departments of Agriculture, Commerce, Defense, Health and Human Services, Housing and Urban Development, and Justice

Other -

Local government

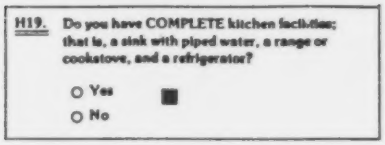
Uses: Fund allocation; development of fair market rents; preparation of components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; program planning, administration, and evaluation; comparison of civilian and uniformed service members' housing costs; preparation of models and operation cost estimates; research; analysis of national policy.

Development of shelter costs for various subgroups of the population such as the elderly and the poor; determining eligibility for housing assistance.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block numbering areas and other political and statistical geography.

Item: H19 COMPLETE KITCHEN FACILITIES


H19. Do you have COMPLETE kitchen facilities; that is, a sink with piped water, a range or cookstove, and a refrigerator?
O Yes
O No

Used with other housing data in identification of low quality housing.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, and Housing and Urban Development

Other -

Local government

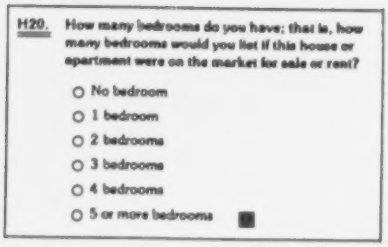
Uses: Determining suitability of housing for low income occupancy; allocation of funds for rehabilitation and development grants; preparation of components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; program planning, administration, and evaluation.

Indicate level of housing for local planners; used to plan nutrition programs such as "meals on wheels."

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block numbering areas and other political and statistical geography.

Item: H20 BEDROOMS



H20. How many bedrooms do you have; that is, how many bedrooms would you list if this house or apartment were on the market for sale or rent?

- ○ No bedroom
- ○ 1 bedroom
- ○ 2 bedrooms
- ○ 3 bedrooms
- ○ 4 bedrooms
- ○ 5 or more bedrooms

Aid in measuring adequacy of housing and in evaluating the cost of shelter.

Users: Federal -

Departments of Agriculture, Commerce, Education, Health and Human Services, Housing and Urban Development, and Justice
Federal Home Loan Bank Board

Other -

State governments
Local planners
Builders

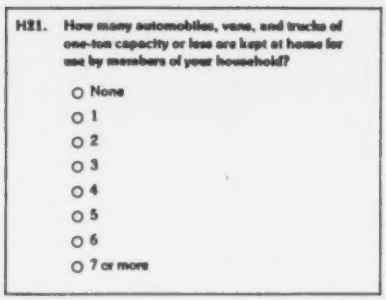
Uses: Aid in establishing "fair market rents"; preparation of estimates of housing needs; annual report of the President to Congress; preparation of the components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; program planning, administration, and evaluation; comparison of civilian and uniformed service members' housing costs; enforcement of various Civil Rights Acts. Acts.

Forecasting school enrollment; analyzing the inventory of vacant housing units.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block numbering areas and other political and statistical geography.

Item: H21 VEHICLES AVAILABLE


H21. How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of your household?

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

A count of the number of personal use vehicles (automobiles, vans and light trucks).

Users: Federal -

Departments of Agriculture, Energy, Health and Human Services, Housing and Urban Development, Justice, and Transportation
Environmental Protection Agency
Federal Emergency Management Agency
Federal Energy Regulatory Commission
Federal Home Loan Bank Board
Nuclear Regulatory Commission
Urban Mass Transportation Administration

Other -

State governments
Local governments and planners
Private firms

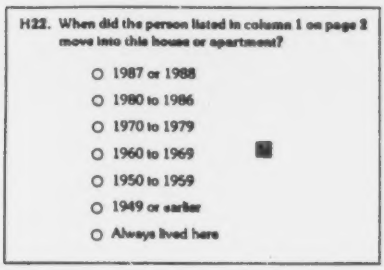
Uses: Transportation policy formulation; state grants for projects to construct, reconstruct or improve off-system roads; planning and evaluating carpool and vanpool projects and highway safety programs; formulating nuclear disaster evacuation plans; assessing transportation problems of handicapped workers; producing environmental impact statements; monitoring emission standards; providing planning and operating assistance for public transit systems.

Local transportation studies; highway planning; parking planning; energy consumption and air pollution control activities.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block numbering areas and other political and statistical geography.

Item: H22 YEAR HOUSEHOLDER MOVED IN


H22. When did the person listed in column 1 on page 2 move into this house or apartment?
1987 or 1988
1980 to 1986
1970 to 1979
1960 to 1969
1950 to 1959
1949 or earlier
Always lived here

Provides an analysis of residential stability.

Users: Federal -

Departments of Agriculture, Commerce, Defense, Health and Human Services, and Housing and Urban Development
Federal Home Loan Bank Board

Other -

State governments
Local governments

Uses: Preparation of components of the: a) national income and product accounts, b) regional economic accounts, and c) pollution abatement and control expenditures; comparison of civilian and uniformed service members' housing costs; program planning and evaluation; analysis of housing markets in which thrift institutions operate in terms of the demand for housing credit and the appropriateness of thrift operational policies to specific markets; congressional declaration of national housing policy.

Identify newly developing and high turnovers areas; useful in planning school construction, social services, and other programs.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H23, H24, H25, H26: SHELTER COSTS FOR HOMEOWNERS

INSTRUCTION
Answer questions H23, H24, H25 and H26, if this is a one-family house, a condominium, or a mobile home which you own or are buying.
Do not answer questions H23, H24, H25 and H26 if you:
• rent this house, apartment, or mobile home
• live in a house on ten or more acres
• live in a one-family house with a business or medical office on the property.
IF ANY OF THESE GO TO PAGE 6
H23. What were the real estate taxes on THIS property last year?
$ 00
Yearly amount — Dollars
OR
None
H24. What was the annual payment for fire, hazard, and flood insurance on THIS property?
$ 00
Yearly amount — Dollars
OR
None
H25a. Do you have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property?
Yes, mortgage, deed of trust, or similar debt
Yes, contract to purchase
Go to H25b
No — Skip to H25c
b. How much is your regular monthly mortgage payment on THIS property? Include payment only on first mortgage or contract to purchase.
$ 00
Monthly amount — Dollars
OR
No regular payment required — Skip to H27
c. Does your regular monthly mortgage payment include payments for real estate taxes on THIS property?
Yes, taxes included in payment
No, taxes paid separately or taxes not required
d. Does your regular monthly mortgage payment include payments for fire, hazard, and flood insurance on THIS property?
Yes, insurance included in payment
No, insurance paid separately or no insurance
H26a. Do you have a home equity loan or a second or junior mortgage on THIS property?
Yes
No — Skip to H27
b. How much is your regular monthly payment on all home equity loans or second or junior mortgages?
$ 00
Monthly amount — Dollars
OR
No regular payment required

Provide the cost of homeownership including mortgage payment, taxes, and insurance.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, Housing and Urban Development, and Justice
Advisory Committee on Intergovernmental Relations
Federal Home Loan Bank Board

Other -

State governments
Local governments

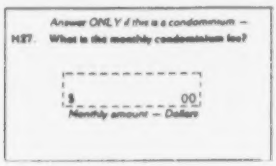
Uses: Analysis of costs of homeownership and affordability, housing needs of lower income families, and progress in assuring reasonable shelter costs; preparation of components of the: a) national income and product accounts and b) regional economic accounts; study of state and local tax burdens; enforcement of various Civil Rights Acts; program planning, administration and evaluation; analysis of housing markets in which thrift institutions operate in terms of the demand for housing credit and the appropriateness of thrift operational policies to specific markets.

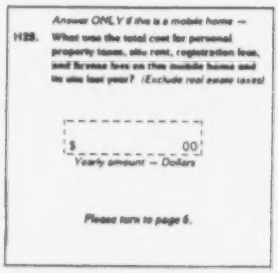
Development of local policies dealing with property taxes and financing of homebuilding and remodeling.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: H27, H28: SHELTER COSTS FOR HOMEOWNERS




Answer ONLY if this is a mobile home —
H28. What was the total cost for personal property taxes, site rent, registration fees, and license fees on this mobile home and its site last year? (Exclude real estate taxes)
$ 00
Yearly amount — Dollars
Please turn to page 6.

Similar to H23-H26 but provides additional costs to homeowners of two distinct types of housing that are becoming more prevalent during the decade: condominiums and mobile homes.

Users: Federal -

Departments of Agriculture, Commerce, Health and Human Services, Housing and Urban Development, and Justice
Advisory Committee on Intergovernmental Relations
Federal Home Loan Bank Board

Other -

State governments
Local planners

Uses: Analysis of costs of homeownership and affordability, housing needs of lower income families, and progress in assuring reasonable shelter costs; preparation of components of the: a) national income and product accounts and b) regional economic accounts; study of state and local tax burdens; enforcement of various Civil Rights Acts; program planning, administration, and evaluation; analysis of housing markets in which thrift institutions operate in terms of the demand for housing credit and the appropriateness of thrift operational policies to specific markets.

Development of local policies dealing with property taxes and financing of homebuilding and remodeling.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for block groups, block numbering areas, and other political and statistical geography.

Item: C VACANCY STATISTICS

C. Type of unit			O2. Is this unit boarded up?
Occupied	Vacant		
o First form	o Regular		o Yes
o Cont'n	o UHE-owner		o No
	o UHE-renter		

D1. Vacancy status		E. Months vacant
o For rent	o For seasonal/ recreational/ occasional use	o Less than 1 month
o For sale only	o For migratory workers	o 1 up to 2
o Rented or sold, not occupied	o Other vacant	o 2 up to 6
		o 6 up to 12
		o 12 up to 24
		o 24 or more

Type of vacancies, duration of vacancy and boarded up status.

Users: Federal -

Departments of Agriculture, Commerce, and Housing and Urban Development
Federal Home Loan Bank Board
Federal Deposit Insurance Corporation
Federal Reserve Board

Other -

State governments
Local governments and planners
National and local builders
Mortgage lenders

Uses: Planning and implementing loan programs; assessing eligibility for a grant; determine need and effectiveness of mortgage insurance for investments in rental housing; identify any shortage of decent, safe, and sanitary housing for families of lower income; identify housing suitable for acquisition and rehabilitation for lower income housing use; assess eligibility of areas for substantial rehabilitation relative to the level and duration of rental housing vacancies; analyze possible obsolescence of public housing projects relative to location because of vacancies in the area.

Estimate supply and demand for the housing market and determine suitability of the vacant inventory to meet the housing needs of each community.

Products: Printed reports and summary tape files for political areas such as places, counties, states, and the Nation; and for statistical geography such as, census tracts, urbanized areas, and metropolitan statistical areas.

Microfiche and computer tape for blocks, block groups, block numbering areas, and other political and statistical geography.

Responses to Questions
from Senator David Pryor

QUESTION 1. If you read the justifications provided by agencies for the collection of census information, it looks as though use of the decennial census is the required means of collecting everything. On closer examination, one finds that very few statutes require agencies' data to be census-based. Moreover, hardly any of the statutes in question compel a response from individuals. Nevertheless, once a question appears on the census form, individuals are compelled to respond--simply because the question is on the census form. Do you think this is proper and legal?

ANSWER: Yes. The census is the only source of comparable statistical information for all areas of the country. It also is the only source of statistical information of sufficient accuracy, detail, and geographic scope to meet legislative, planning, and program implementation needs at the national, state, and local levels. Given that these are the only data available that satisfy statutory needs, it is essential that response be mandatory, ensuring its reliability for a multitude of purposes. The legality of the mandatory nature and scope of the questions asked in the census was upheld by the United States Court of Appeals for the Second Circuit in the United States v. Rickenbacker, 309 F.2d 462 (1962). The Rickenbacker case involved a prosecution for refusal to respond to the census and, in affirming the lower Court's conviction, the Court of Appeals stated:

> "The authority to gather reliable statistical data reasonably related to governmental purposes and functions is a necessity if modern government is to legislate intelligently and effectively. Id. at 463"

QUESTION 2. Under Title 13, what is the penalty that can be imposed on an individual for refusing or neglecting to answer questions on the census form? Further, if an individual provides information to the Bureau with the intent to cause an inaccurate enumeration of the population, could he be fined or imprisoned under the law?

ANSWER: Title 13 provides for a maximum penalty of $100 for refusing or neglecting to answer questions on the census form; a maximum penalty of $500 for willfully providing false answers; and a maximum penalty of $1,000, or 1-year imprisonment, or both, for providing information with the intent to cause an inaccurate enumeration of the population.

QUESTION 3. The actual cost of the 1980 census was more than double the initial estimated cost. Your initial estimated cost for the 1990 census was $1.8 billion. You've already upped that estimate to $2.6 billion. If you incur additional costs associated with follow-up on a lower than expected

response rate or a major post-census adjustment because of alleged undercounting, history could easily repeat itself--that is, we could be facing a tab of $3.8 billion. Can you discuss the likelihood of exceeding the current $2.6 billion price tag for the 1990 census--what are you doing to ensure against my worst case scenario?

ANSWER: The $2.6 billion figure is our best current estimate of what it will cost to conduct the 1990 census. We have revised our earlier estimates to reflect a new census design that incorporates improvements based on evaluation of our 1980 experience and testing that we conducted over the past 2 years. This estimate provides for uncontrollable cost increases, such as increased clerical labor unit costs, and additional costs due to a 5-percentage points lower mail-return rate that we expect based on recent evidence of declining cooperation in test censuses. Our estimate also provides for the following improvements to assure that we provide quality, accurate census data, and meet the public's needs for similar information as provided in 1980:

- Improved address list quality. We plan to develop an automated address list and to allow for the U.S. Postal Service to verify addresses. These improvements will assure coverage and allow prompt scheduling of enumerator work assignments.

- Concurrent processing of census forms as they are collected. This will enable us to conduct follow-up promptly and to accelerate the release of 1990 data products.

- Improved control over operations and costs. We will put in place a district, regional, and processing office management structure and a fully integrated management information system to monitor and control operations of the thousands of interrelated tasks and schedules that make up the 1990 census.

- Greater outreach and publicity efforts. We will undertake a nationwide educational campaign and make every effort to enlist the help of local government and community-based organizations to encourage people to participate in the census.

We believe our improvements will help us to monitor and control the cost of our 1990 census operations. We could adjust the total cost estimate to provide for uncontrollable costs due to future pay rate increases or changes in inflation assumptions. Our estimate covers the costs of the scenario that we believe is most likely to occur. Factors such as diminished public cooperation in responding to the census, despite our best outreach and promotion efforts, or natural disasters (such as floods, fires, or hurricanes), strikes, or civil disturbances could affect 1990 census operations and costs. These kinds of events, however, are beyond our control. Our approach is to develop and propose contingency plans and resources, diminishing disruption and excessive cost overruns if these kinds of events occur.

QUESTION 4

a. When do you anticipate sending the dress rehearsal questionnaire to OMB for approval? to the printer?

b. When is the dress rehearsal scheduled?

c. When do you anticipate sending the final questionnaire for the 1990 census to OMB for approval?

d. When does the Bureau send the final questionnaire to the printer?

ANSWER a: The dress rehearsal questionnaires were sent to OMB for approval on June 4, 1987. We expect to send them to the printer in October 1987.

ANSWER b: Census Day for the dress rehearsal is March 20, 1988. This date falls on the Sunday before Palm Sunday and is parallel to Census Day in 1990.

ANSWER c: We plan to send the 1990 questionnaires to OMB in August 1988.

ANSWER d: We expect to send the final 1990 census questionnaires to the printers in January 1989.

QUESTION 5. In your testimony, you indicated you are conducting three research projects on questionnaire design.

a. What is the purpose of each of these projects?

b. With regard to the national sample survey you plan, when do you anticipate having the results?

c. Finally, what impact will these projects have on the development of the 1990 questionnaire if the results of your projects come in after the questionnaire has been designed?

ANSWER a: The Questionnaire Design Project is a broad program of research designed to improve the design and wording of decennial census short- and long-form questionnaires. It consists of 3 components or phases: (1) research on and development of alternative questionnaires by an outside contractor, (2) development and classroom testing of alternative questionnaires by Census Bureau staff, and (3) a mailout/mailback field test involving alternative census forms.

It is important to stress, as we did in our May 14 testimony, that much of this research is focused on the year 2000 because overall results will not be available until the end of next year. This timing is far too late to incorporate radical design changes into the 1990 census forms. We have, however, already identified some improvements in the questionnaires based on the earlier phases of this project that have been included in the dress rehearsal questionnaires sent to OMB earlier this month.

The first phase of the project was completed in March. We hired a contractor to conduct research on how the design and question wording of the 1986 Los Angeles Test Census long-form questionnaire affected respondents' abilities to complete it correctly. The contractor conducted a number of individual (27) and group (8 groups with a total of 73 respondents) observations in which comments were elicited about respondent problems with the questionnaire. The contractor used these findings to evaluate the questionnaire, make general recommendations, and design an alternative version of the census form.

The second phase of the project is partially completed. In this phase, Census Bureau researchers conducted one-on-one observations of persons completing the Los Angeles long-form questionnaires and developed an alternative questionnaire based on their findings. The alternative questionnaire was then tested against the Los Angeles form in classroom tests conducted in Dallas, Philadelphia, Boston, and Chicago. More than 500 respondents were tested, and we expect to have final results available in the fall of this year.

The third phase of the project is a mailout/mailback field test of alternative questionnaires that are designed as a result of information gathered in the earlier phases. It is essential to the success of the program that we obtain information from a national sample of households. The test is tentatively scheduled for late 1987 or early 1988. The sample design has not been finalized, but we expect to mail the forms to about 14,000 households, follow up a sample of the nonrespondents, and conduct a reinterview to assess the accuracy of the responses and the reactions to the questionnaire.

ANSWER b: Final results from Phase 3 will be available in the fall of 1988.

ANSWER c: Early research from the study resulted in some redesign of the dress rehearsal questionnaire, including the restructuring and rewording of Question 1, which is the list of persons living in the housing unit on Census Day (including those with no usual home elsewhere). This question requires the respondent to make important conceptual distinctions about who should or should not be listed on the questionnaire. The work provided us with an improved question layout. In addition, a number of wording changes were made to both population and housing questions, instructions, response categories, and skip instructions.

Additional minor changes may be made as a result of the third phase to be completed next year; however, we expect to use the bulk of information gathered from the mailout/mailback test in future content testing for the year 2000 census.

QUESTION 6. Looking at the list of sample housing subjects proposed for the 1990 census, I am curious about the subject "housing quality." In your testimony you mentioned you propose to conduct further field tests of housing quality items. What research have you conducted thus far to test the validity and the operational feasibility of including housing quality questions on the 1990 census? What were the specific questions that you have tested thus far and what kind of questions do you plan to include in your further field tests?

ANSWER: The American Housing Survey (AHS) has included these two items in a series of questions that, in combination, are used by the Department of Housing and Urban Development to describe housing with moderate or severe deficiences. These two items were selected because independent research suggested that they most nearly approximated the results obtained by using the entire AHS quality series.

We included the following two questions in the 1987 Census of North Dakota:

H18 a. Last winter, was there a breakdown in your main heating equipment; that is, was it completely unuseable for 6 consecutive hours or more?

- ° Yes
- ° No - Skip to H19a
- ° Did not live in this house or apartment last winter - Skip to H19a

b. How many times did the breakdown occur?

- ° 1
- ° 2
- ° 3
- ° 4 or more

H23. Does this house or apartment have holes in the floor?

- ° Yes
- ° No

The OMB has denied approval of these questions on the Content Reinterview for the 1987 Test in North Dakota. It has also denied approval of these questions on the Special Urban Study scheduled for June 1987. Accordingly, in the absence of (1) any reinterview and reconciliation in North Dakota and (2) any testing in urban areas, it is not likely that we will request their inclusion in the 1990 census.

QUESTION 7. What did the Bureau learn from the 1986 National Content Test? As a result of this test, what changes have you made to the questionnaire content?

ANSWER: The National Content Test (NCT) was the major vehicle for determining the subjects and question versions to be included in the 1990 census. Our selections were based on extensive analyses of the nonresponse rates and inconsistency

and bias measures associated with the survey's results. General information about the types of changes made to the short- and long-form questionnaires based on results of the NCT can be found in Attachment A.

QUESTION 8. Recently, the West German government encountered resistance to its upcoming census due to concerns about privacy. What lessons can we learn from this experience?

ANSWER: There are several lessons here. First, it is critical that we maintain confidentiality and privacy, both real and perceived. We believe the strict confidentiality provisions of Title 13 are at the heart of our ability to collect and publish significant amounts of data, including items that some individuals might regard as sensitive. We could not collect most data as easily, or some data at all, if the public was not aware of these provisions and the Census Bureau's commitments and abilities to protect the confidentiality of individual responses.

Second, the sequence of events in West Germany points out how difficult it is to predict events that can have a devastating effect on a census. A similar organized resistance to our 1990 census, even on a local scale, could happen, and it might prove almost impossible to recover from this. If, near Census Day, some event occurs that leads to widespread anger or distrust of the Government, this could be reflected in much lower mail-response rates; failure/refusal to answer some or all of the questions; or a general lack of cooperation with census workers. At a minimum, this could increase costs significantly for the census. At worst, as in West Germany, this could force us to delay or cancel the census.

Regarding both these points, it is clear that our outreach and publicity programs, in addition to communicating the importance and benefits of participating in the census, must effectively get the message across that it is safe to participate.

ATTACHMENT A

1990 Census Content Determination - Summary of National Content Test Evaluations for 100-Percent Population Questions

1. Relationship

Issue.--Do the relationship categories, especially those for "natural-born ..." and "step ..." children produce reliable data?

Recommendation.--Yes, but we will need a write-in space for the "other relative" category to aid in coding of subfamilies.

Issue.--Which wording, "unmarried partner" or "partner, friend," produces more reliable data?

Recommendation.--Use "unmarried partner."

2. Race

Issue.--Which version (short, modified 1980, or 1980) produces the most reliable data?

Recommendation.--We provisionally recommend using the short version because of lower nonresponse and acceptable reliability measures. However, we need confirmation that the question produces reliable results for the Asian and Pacific Islander population. Also, this question would require coding on a 100-percent basis. We expect a decision on the coding issue during January 1987. If coding is not feasible or if the results from the short race question are not acceptable for the Asian and Pacific Islander populations, we would opt to use the "modified 1980" race question.

Issue.--Does placing the race and Spanish origin questions together in the sequence improve response rates?

Recommendation.--The response rates to both questions are better when the questions are separated.

Issue.--Does the inclusion of the word "race" improve results?

Recommendation.--Yes, the use of "race" improves the response rate.

3. Age

Issue.--Can respondents code both age and year of birth?

Recommendation.--Yes, respondent coding of both items improves quality. We propose not to ask quarter of birth to allow space for the respondent coded age.

Issue.--Is there a reporting difference between ascending and descending digits in the year of birth question?

Recommendation.--No difference was observed.

4. Spanish/Hispanic origin

Issue.--Which version (short, modified 1980, and 1980) produces the most reliable data?

Recommendation.-- Further evaluation using data from the 1986 test census will be done before any recommendation on the test questions can be made.

Issue.--Does placing the race and Spanish origin questions together improve response?

Recommendation.--Response rates to separated questions are better.

5. Multiple residence

Issue.--Do the questions produce reliable data?

Recommendation.--No, the responses are highly inconsistent. We do not propose including such a question in the dress rehearsal.

6. Residential care

Issue.--Do the questions produce reliable data?

Recommendation.--The reliability of these questions on the NCT is not acceptable. We do not propose using a question to identify residential care facilities in 1990. We are evaluating the cost and success of a special follow up operation, and we share concerns on both follow-up costs and nonsampling errors with the operational divisions. We are also evaluating the possibility of using the questions on household relationship (non relatives) and disability to identify a universe of potential facilities for post census work.

1990 Census Content Determination - Summary of National Content Test Evaluations for Sample Population Questions

1. Educational attainment

Issue.--Should we measure by years of school completed or by highest diploma or degree and grouping of grades below the high school level?

Recommendation.--Use diploma/degree question (NCT-1), modified to include identification of nursery school, kindergarten, and never attended.

Issue.--Should we collect data on field of study for postsecondary schooling?

Recommendation.--No, the needs are not widespread enough to support inclusion on a large census sample.

2. School enrollment

Issue.--Is there a need to include school levels in the enrollment question?

Recommendation.--No, see description of modifications to attainment question.

Issue.--Is there a need to include type of school in the enrollment question?

Recommendation.--Yes, the distinction between public and private should be asked.

3. Vocational training

Issue.--Do the questions produce reliable data?

Recommendation.--No, the data were not reliable for either version. Therefore, we do not propose to include this question.

4. Ethnicity

Issue.--Which specific topic - ancestry or parental birthplace - provides more useful data?

Recommendation.--Based on overall data needs and the strong support from ethnic groups, we feel data from the ancestry question would be more useful. Although parental birthplace is a more objective concept and, therefore, produces more statistically reliable results, the uses of ancestry data are more widespread. Also, the NCT results on ancestry are more consistent with CPS results than were the 1980 census data, indicating that minor wording changes have improved the reporting.

Issue.--Should the race, Spanish origin, and ancestry questions be sequenced together on sample forms?

Recommendation.--No, see discussions under race and Spanish origin.

Ethnicity (continued)

Issue.--If we were to include parental birthplace questions, which version (foreign country only; state or foreign country) produces better data?

Recommendation.--We recommend the state or foreign country version of the question.

Issue.--Did minor wording changes in the ancestry question effect the reporting relative to 1980?

Recommendation.--Yes, the revised wording seemed preferable. The nonresponse rate was comparable to those for the 1980 census and the 1979 Current Population Survey (CPS), and the percent reporting single and multiple residences was more like the 1979 CPS.

5. Place of birth and citizenship

Issue.--Which version (1980 or revised) produces better data?

Recommendation.--The revised version which allows native-born persons to respond "Yes, born in U.S." or "Yes, born in Puerto Rico, etc.," reduced the overreporting in the "naturalized citizen" and "born abroad of American parents" categories.

6. Year of Entry

Issue.--Is the additional detail (single years) for recent years reliable?

Recommendation.--The NCT sample was too small to detect any statistically significant differences. However, because of policy needs, we will use either single-year categories, or two or three-year categories.

7. Language usage and ability to speak English

Issue.--Is the 1980 version or a revised version preferred?

Recommendation.--We propose to use the 1980 version.

Issue.--Should we include questions of the ability to speak a non-English language, ability to read and write English and a non-English language, and mother tongue.

Recommendation.--No, the needs do not justify inclusion on a large census sample.

8. Migration (Residence 5 Years Ago)

Issue.--Did the new question part on "town/township" in the Northeast produce reliable results?

Recommendation.--No, nonresponse rates were very high even for persons residing in the Northeast. We do not propose to include this question part in the dress rehearsal.

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Migration (continued)

Issue.--Did the alternate version with a separate space for reporting foreign country improve reliability of reporting?

Recommendation.--No, the additional answer space is not worth the physical space on the questionnaire.

Issue.--For the question on "incorporated limits," does the inclusion of a "don't know" category improve the response.

Recommendation.--No improvement was noted; therefore, we do not intend to include the category.

Issue.--Should we include the 1980 census questions on activities five years ago (work, Armed Forces, college attendance.)

Recommendation.--We do not propose to include these questions since uses are not widespread and administrative data can be substituted.

9. Disability limitation for persons under 18 years

Issue.--Do the proposed questions produce reliable data?

Recommendation.--No, responses to these questions were highly inconsistent. We do not propose to include such questions in the dress rehearsal.

10. Disability limitations for adults

Issue.--Which limitation questions have the best reliability?

Recommendation.--The questions on work limitations and prevention have moderate inconsistency measures, as was found in 1980 evaluations. Because of the widespread need, we propose to retain them for 1990.

The questions on mobility limitation and ability to drive a car also have moderate inconsistency levels. However, the ability to drive a car had a high nonresponse level for the older population, a target group for disability questions. Because of this and because of the broader usefulness of the mobility limitation question, we propose to include the mobility limitation question in 1990, but not the ability to drive a car question. The mobility limitation question would replace the 1980 question on public transportation disability.

The question on personal care limitations had somewhat higher levels of inconsistency. We propose to include this question for reasons expressed by users of data on the older population and since we are evaluating the potential utility of this question in identifying residential care facilities.

11. Conditions/disability types

Issue.--Do the questions produce reliable data?

Recommendation.--Some of the conditions (4 to 6 depending on the question) were reported well, but the rest were not reported consistently. Therefore, none of the questions accurately identify a broad enough range of conditions. We do not propose to include such a question in the dress rehearsal.

12. Disability-Reason for Limitation

Issue.--Did the questions adequately identify the primary reason for limitation?

Recommendation.--No, as for the conditions questions, the results were not acceptable.

13. Veteran status topics

Issue.--Did the expanded question on veteran status that identifies current active duty and the reserves/National Guard produce reliable data?

Recommendation.--Yes, the expanded version is acceptable. However, choices may have to be made among this and other proposed expansions in this series (see below.)

Issue.--Did the additional detail for recent peacetime service in the period of service question yield acceptable results?

Recommendation.--Yes, but choices may be necessary among proposed expansions in this series.

Issue.--Did the new question of total years of military service produce acceptable results?

Recommendation.--Yes, but choices may be necessary among proposed expansions in this series.

14. Fertility (Children Ever Born)

Issue.--No new versions were tested. The main issue is the relative priority for fertility data compared to new topics and expansions in other topics.

Recommendation.--We propose to include this question in the dress rehearsal because of its importance as a basic sociodemographic measure. The need for decennial census data is critical for small population groups, like recent immigrants.

As we proceed to design the dress rehearsal questionnaire, this item may have to be dropped because of space and burden considerations.

15. Marital history.-(whether married more than once, date of (first) marriage, and reason first marriage ended).

Issue and Recommendation.--Same as Fertility.

5

16. Work status last week (Employment status)

Issue.--Did a new question with a specific response category for housework and volunteer work produce more reliable results?

Recommendation.--No, there was no difference between response rates for the two versions. We propose retaining the 1980 version.

17. Place of work

Issue.--Did the new question part on "town/township" in the Northeast produce reliable results?

Recommendation.--No, nonresponse rates were high. We do not propose including this question part.

Issue.--For the question on "incorporated limits," does a "don't know" category improve response?

Recommendation.--No improvement--therefore, we do not intend to include the category.

18. Means of transportation to work

Issue.--Can we obtain reliable data on each mode and on the principal mode of travel?

Recommendation.--No, many illogical mode combinations were reported (for example car and worked at home.) Therefore, we plan to use the 1980 census question on principal mode with some modification of the response categories.

Issue.--Is there worthwhile information in the write-in space for other means of transportation?

Recommendation.--No, we will not include a write-in space for 1990.

Issue.--Should we include the 1980 questions on persons per vehicle and carpooling arrangements?

Recommendation.--We propose including the question on persons per vehicle, but dropping the question on carpooling arrangements because of limited use.

19. Travel time to work

Issue.--Which new version produces more reliable results? Should the new information on the time of day of the trip, in addition to total minutes, be included in the census?

Recommendation.--The question asking for departure time and total minutes to work produced better results than the question asking for departure and arrival time. The information on peak commuting times is very important to local transportation planners nationwide. We propose to include the new question part if space allows.

20. Industry and occupation

Issue.--Can we obtain branch of Armed Forces and code military occupations?

Recommendation.--The NCT results indicate this is feasible. We plan to proceed with developing the coding materials (in cooperation with the Defense Department).

21. Class of worker

Issue.--Can we obtain reliable data on two new categories--employees of nonprofit organizations and employees of international organizations or foreign governments?

Recommendation.--The reliability for "nonprofit" was acceptable, but reliability for "international-foreign" was not. We plan to include the former category, space allowing.

22. Work experience in previous year

There were no test evaluations in this area. We propose to include the 1980 census questions on work status last year, weeks worked, and usual hours worked per week. We do not plan to ask weeks looking for work.

23. Money income

Issue.--Can we collect reliable data on retirement/pension income? If so, which version yields better results?

Recommendation.--Our provisional proposal is to include the short (1-part) version. The more detailed version that identified source of the pension income was not well reported. Even though initial evaluations show the short version to be acceptable, we are investigating some problems of double reporting of pension income.

Issue.--Should we expand the "other income" question to obtain data separately on V.A. payments, unemployment compensation, and child support and alimony?

Recommendation.--We do not propose this expansion because of reliability problems and space constraints.

Issue.--Do we need a question on total income?

Recommendation.--This question proved helpful in 1980 in that it allowed us to avoid imputation in 4-5 percent of the cases. A final decision must wait for formal questionnaire design. We may have to choose between the total income question and the question on pension income.

Issue.--Should we include questions on all the income types identified in 1980?

Recommendation.--Yes, data are critical even though some consistency levels are troublesome.

24. Noncash benefits and health insurance coverage

Issue.--Do the questions on food stamps, energy assistance, school meals, public and subsidized housing, health insurance coverage, and pension coverage provide reliable data? If so, should we include them in the 1990 census?

Recommendation.--The reliability of the data measured in the NCT is acceptable. However, we do not propose to include questions to identify "noncash benefits" in the dress rehearsal or in 1990.

The current income and poverty definitions do not reflect the value of such benefits, nor is there an acceptable methodology for assigning values to such benefits at the local level.

We tentatively propose to include a question on health insurance coverage for each person. The needs expressed for health insurance coverage, including Medicare and Medicaid, reflect the broader interests of public policy planners and of an overall socioeconomic profile. The final decision will reflect consideration of space and respondent burden constraints.

25. Second job

Issue.--Should we include questions on presence of second job, hours worked at principal (or second) job, and industry-occupation-class of worker of second job.

Recommendation.--We do not propose to include these questions primarily because the space required on the questionnaire is prohibitive.

26. Farm residence

Issue.--Which version of the screener and product sales questions produces more reliable data?

Recommendation.--The revised versions are most acceptable. The preferred screener is the version proposed by our Agriculture Division that asks about participation in agricultural activities rather than "type of property."

27. Presence of parent and spouse in household

Issue.--Should we include these questions?

Recommendation.--Although reliability measures are good, space constraints preclude adding these questions. They were proposed to improve the identification and coding of detailed family relationships.

Current Recommendations for 1990 Housing Questions

100 Percent

Item and Issue	1990 Recommendations	1980 Status	Comments
1. Units in Structure Comparing 1980 version with a version having an experimental category "commercial building with 1 apartment."	Use modified 1980 version: Which best describes this building? Include all apartments, flats, etc. even if vacant. 0 A mobile home or trailer 0 A one-family house detached from any other house 0 A one-family house attached to one or more houses 0 A building with 2 apartments 0 A building with 3 or 4 apartments 0 A building with 5 to 9 apartments 0 A building with 10 to 19 apartments 0 A building with 20 to 49 apartments 0 A building with 50 or more apartments 0 Other	Allocation 7.8 percent L-Fold 30	There are so few responses to the "Commercial building with 1 apartment" category that it does not appear to be a significant addition to the units in structure distribution. Responses to presence of a commercial establishment or medical office suggest that some responses to "Commercial building with 1 apartment" are inaccurate. The small percentage of housing units in the new category does not justify its inclusion in the units in structure distribution.
2. Rooms Comparing 1980 version with a "roster of rooms" version.	Use 1980 version: How many rooms do you have in this house or apartment? Do NOT count bathrooms, porches, balconies, foyers, halls, or half-rooms. 0 1 room 0 4 rooms 0 7 rooms 0 2 rooms 0 5 rooms 0 8 rooms 0 3 rooms 0 6 rooms 0 9 or more rooms	Allocation 1.7 percent	While the rooms roster seems to improve the data slightly it does not appear appropriate for a mail-out/mail-back survey because of high non-response rate and inordinate space requirements. We plan to continue to examine the NCT data to help us in improving the format and instructions of the 1980 version.

Item and Issue	1990 Recommendations	1980 Status	Comments
3. Tenure Comparing 1980 modified version with a version that includes two owner categories: "Owned with a mortgage or loan" and "Owned free and clear (without a mortgage)."	Use new version: Is this house or apartment - 0 Owned with a mortgage or loan? 0 Owned free and clear (without a mortgage)? 0 Rented for cash rent? 0 Occupied without payment of cash rent?	Allocation 2.0 percent L-fold 8	There is a small difference in the owner occupancy rate between current surveys and the census. Current surveys being about 1 percent higher. Our hypothesis was that this difference was partially attributable to some mail respondents having a mortgage considering themselves as renters. In the NCT mail returns there was no significant difference between the 1980 version and the experimental version for nonresponse. There was a small but not significant difference in percent owner-occupied in the expected direction. In the enumerator returns there was a significant difference in the expected direction. We plan to use the new version because of the difference.
4. Condominium Status Compare 1980 version to two new versions: 1980 with definitions and a response category "cooperative". 1980 with response category "cooperative" and no definition.	Use a modified 1980 version (tentatively): Is this house or apartment part of a condominium? 0 No 0 Yes	Allocation 3.5 percent L-Fold 38	The questions contain itions yield the same percentage of condominiums as the 1980 version. As to cooperatives, the definitional question reduces the estimate of cooperatives slightly, but still overestimates the number by more than 100 percent. Although we could reduce the cooperative estimate in our processing, we still believe the estimate would be too high.

Item and Issue	1990 Recommendations	1980 Status	Comments
5. Plumbing facilities In 1980, we had reason to believe lacking plumbing was overstated in some large North Eastern cities. We thought this represented respondent misreporting. Accordingly we tested several versions, as follows: 1980 Version 1980 Slight Modification Version 1980 Shortened Version 1980 Long Version (3 separate parts)	Use modified 1980 version with shortened response categories. Do you have complete plumbing facilities in this house or apartment; that is, 1) hot and cold piped water, 2) a flush toilet, and 3) a bathtub or shower? 0 Yes, have all three facilities 0 No	Allocation 1.0 percent L-Fold 47	All versions had a non-response rate of about 2 percent. For mail returns all versions except the short question identified the same proportion (about 1.2 percent) lacking complete plumbing. The short version identified only 0.6 percent lacking, significantly lower than the other 3 versions. When enumerator returns are considered, the lacking plumbing rate is similar. We, therefore, recommend using a modified 1980 question with shortened response categories.
6. Value Screener No issue.	Use modified 1980 version with skip instructions. If you live in an apartment building, skip to question H__ a. Is the house on ten or more acres? 0 No 0 Yes b. Is there a business (such as a store or barber shop) or a medical office on this property? 0 No 0 Yes		

Item and Issue	1990 Recommendations	1980 Status	Comments
7. Value Compare 1980 version with a version containing a write-in entry.	Use modified 1980 version: Answer only if YOU OWN OR ARE BUYING this house or apartment-- What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale? 0 Less than $10,000 0 $10,000 to $14,999 0 $15,000 to $19,999 0 $20,000 to $24,999 0 $25,000 to $29,999 0 $30,000 to $34,999 0 $35,000 to $39,999 0 $40,000 to $44,999 0 $45,000 to $49,999 0 $50,000 to $54,999 0 $55,000 to $59,999 0 $60,000 to $69,999 0 $70,000 to $79,999 0 $80,000 to $89,999 0 $90,000 to $99,999 0 $100,000 to $124,999 0 $125,000 to $149,999 0 $150,000 to $174,999 0 $175,000 to $199,999 0 $200,000 to $249,999 0 $250,000 to $299,999 0 $300,000 to $399,999 0 $400,000 to $499,999 0 $500,000 or more (These are the proposed 1988 categories, 1990 categories to be determined.)	Allocation 4.5 percent Same as 1980 question H11 except exclusion has been deleted.	The NCT was intended to provide information on the difference between data collected in a set of intervals compared to a written entry. The write-in entry resulted in a higher nonresponse rate. There was no difference in the median value computation although there was a significant difference in about one-third of the categories.

Item and Issue	1990 Recommendations	1980 Status	Comments
8. Rent Compare 1980 version with a version containing a write-in entry.	Use modified 1980 version: Answer only if you PAY RENT for this house or apartment - What is the monthly rent? 0 Less than $60 — 0 $300 to $324 0 $60 to $79 — 0 $325 to $349 0 $80 to $99 — 0 $350 to $374 0 $100 to $119 — 0 $375 to $399 0 $120 to $139 — 0 $400 to $424 0 $140 to $159 — 0 $425 to $449 0 $160 to $179 — 0 $450 to $499 0 $180 to $199 — 0 $500 to $549 0 $200 to $224 — 0 $550 to $599 0 $225 to $249 — 0 $600 to $749 0 $250 to $274 — 0 $750 to $999 0 $275 to $299 — 0 $1,000 or more (These are the 1988 categories; 1990 categories to be determined.)	Allocation 2.9 percent	Like value, the rent write-in also had a higher nonresponse rate. The median rent calculated from the write-in was significantly higher. Therefore, we will study our rent distributions and methods of computing medians for 1990.
9. Can we identify congregate housing by asking a question on "meals included in rent?"	Probably include the question, but it is still subject to further testing. Does the monthly rent include any meals? 0 No 0 Yes	The NCT nonresponse rate was 5.8 percent	The low nonresponse rate for meals included in rent and the relatively low incidence suggests respondents understand the question and that there are few false positives. More research is scheduled to be conducted in the 1987 Special Test. We are tentatively proposing to include this question.

Item and Issue	1990 Recommendations	1980 Status	Comments
10. Telephone, including number Can we collect telephone and number within the body of the questionnaire?	New version: Do you have a telephone in this house or apartment? 0 Yes - Enter phone number ( ) ____ area code phone number 0 No	Allocation 2.4 percent	The recommended version has a mail return nonresponse rate of 3.6 percent. Although we prefer this version we see two problems that need further research. 1. Inconsistency with previous data. 2. A very high percentage of units reporting telephone in unit providing the phone number.

VACANCY ITEMS

Item and Issue	1990 Recommendations	1980 Status	Comments
1. Vacancy Status No issue	O UHE-owner O UHE-renter O For rent O For sale only O Rented or sold, not occupied O Held for seasonal/recreational/ occasional use O For migratory workers O Other vacant		
2. Boarded up No issue	Is this unit boarded up? O Yes O No		
3. Months vacant No issue	O Less than 1 O 1 up to 2 O 2 up to 6 O 6 up to 12 O 12 up to 24 O 24 or more		

Current Recommendations for 1990 Housing Questions

Sample

Item and Issue	1990 Recommendations	1980 Status	Comments
1. Source of water No issue.	Do you get water from -- O A public system such as a city water department, or private company? O An individual drilled well? O An individual dug well? O Some other source such as a spring, creek, river, cistern, etc.?		
2. Sewage disposal No issue	Is this building connected to a public sewer? O Yes, connected to public sewer O No, connected to septic tank or cesspool O No, use other means		

Item and Issue	1990 Recommendations	1980 Status	Comments
3. Year structure built. In 1980, we are reasonably certain that in many communities the number of older housing has been under reported. We designed alternative response categories to resolve this problem. 1. Questions with "Don't know" category on theory that respondents who really guessed would use this category and we could allocate these DKs better. 2. Have fewer response categories. Make the last category 1959 or earlier. 3. Modified 1980 version.	Use new version: About when was this building first built? 0 1989 or 1990 0 1985 to 1988 0 1980 to 1984 0 1970 to 1979 0 1960 to 1969 0 1950 to 1959 0 1940 to 1949 0 1939 or earlier 0 Don't know	Allocation 7.5 percent L-Fold 25	The nonresponse rate was about the same for the three versions being considered. The "Don't knows" represented about 16% of the responses. With the 5% nonresponse rate this represents a minimum of 21% to be allocated. The version having the last category "1959" or earlier" apparently achieves the desired objective. That is, a higher proportion of older units. The major drawback is that this does not meet legislative needs. (If the legislative need is no longer valid, we would recommend using this version.) Our recommendation is to use the year built categories ending with 39 or earlier and to add a "Don't know." even with the large allocation rate, we think the resultant edited/allocation distribution will be a more accurate representation of year built. In 1980 we allocated about 29% to the "1939 or earlier" category while the distribution should be about 26% (with allocations).

Item and Issue	1990 Recommendations	1980 Status	Comments
4. Year moved in. No issues.	When did the person listed in column 1 on page 2 move into this house or apartment? O 1989 or 1990 O 1985 to 1988 O 1980 to 1984 O 1970 to 1979 O 1960 to 1969 O 1950 to 1959 O 1949 or earlier O Always lived here		
5. Vehicles. Are there differences in distribution when we use one combined question rather than two separate ones?	Use new version: How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of your household? O none O 1 O 2 O 3 O 4 O 5 O 6 O 7 or more	1980 questions H28 and H29 combined.	There was no significant difference in nonresponse rates between the 2 question 1980 version and the proposed single question 1990 version. The combined version yields a slightly higher proportion of households with no vehicles and a lower proportion of households with 3 or more vehicles than the 1980 version.
6. Heating equipment. No issues.	Which kind of heating equipment is used MOST to heat this house or apartment? O Central warm-air furnace with ducts to individual rooms O Steam or hot water system (radiator or baseboard pipes) O Electric heat pump O Other built-in electric units (permanently installed in wall, ceiling, or baseboard) O Floor, wall, or pipeless furnace O Room heaters with flue or vent, burning gas, oil, or kerosene O Room heaters WITHOUT flue or vent, burning gas, oil or kerosene (not portable) O Fireplaces, stoves, or portable room heaters of any kind O Solar equipment O No heating equipment		

Item and Issue	1990 Recommendations	1980 Status	Comments
7. Heating fuel. Can we collect accurate data on secondary heating fuel? If we can, what format should we use?	Use modified 1980 version: Which FUEL is used MOST for heating this house or apartment? O Gas: from underground pipes serving the neighborhood O Gas: bottled, tank, or LP O Electricity O Fuel oil, kerosene, etc. O Coal or coke O Wood O Solar energy O Other fuel O No fuel used	Allocation 6.1 percent L-Fold 14	NCT experience shows nonresponse rates for heating fuel: Primary fuel 1980 control version 4.5 Exp. two-part version 4.7 Exp. side-by-side version 18.5 Secondary fuel Two-part 18.4 Side-by-side 58.5 The L-Fold indexes for primary fuel are: 1980 version 12; two-part 13; side-by-side 13. The L-Fold for the two-part secondary fuels are very high. When Primary fuel is: / L-Fold for secondary is: Gas 75 Electricity 70 Oil 70 Other 51 We are continuing to review these data but our recommendation is not to ask a question on secondary fuels.
8. Water heating fuel. No issues.	Use modified 1980 version: Which FUEL is used MOST for heating the water in this house or apartment? O Gas: from underground pipes serving the neighborhood O Gas. bottled, tank, or LP O Electricity O Fuel oil, kerosene, etc. O Coal or coke O Wood O Solar ener O Other fuel O No fuel used	Allocation 3.4 percent	

Item and Issue	1990 Recommendations	1980 Status	Comments
9. Cost of Utilities We have had an upward bias in the reporting of utility costs. We hypothesized that by asking for yearly costs for electricity and gas we could lower this upward bias.	Use new version (tentatively) What are the yearly costs of utilities and fuels for this house or apartment? If you have lived here less than 1 year, estimate the yearly cost. a. Electricity $\boxed{\$ \quad .00}$ OR Yearly cost Dollars O Included in rent or in condominium fee O No charge or electricity not used b. Gas $\boxed{\$ \quad .00}$ OR Yearly cost Dollars O Included in rent or in condominium fee O No charge or gas not used c. Water $\boxed{\$ \quad .00}$ OR Yearly cost Dollars O Included in rent or in condominium fee O No charge d. Oil, coal, kerosene, wood, etc. $\boxed{\$ \quad .00}$ OR Yearly cost Dollars O Included in rent or in condominium fee O No charge or these fuels not used		The new version improves respondent reporting for both gas and electricity. For electricity the experimental versio shows fewer occupied units reporting in the highest dollar category and more units in the lowest dollar category. Gas shows the same pattern. The nonresponse rate increased, however, for the new version. We believe the error created by the higher allocation rate will be more than offset by the gain in data accuracy using the new version.

Item and Issue	1990 Recommendations	1980 Status	Comments
10. Bedrooms. What happens if the definition of bedrooms were revised as suggested at most LPMs?	Use new version: How many bedrooms do you have; that is, how many bedrooms would you list if this house or apartment were on the market for sale or rent? 0 No bedroom 0 3 bedrooms 0 1 bedroom 0 4 bedrooms 0 2 bedrooms 0 5 or more bedrooms	1980 question H26 modified Allocation 6.3 percent	There was virtually no difference between the 1980 version and the experimental version in nonresponse rates and in the distribution of units by number of bedrooms. One category "2 bedrooms" showed a slightly larger number of units in the 1980 version.
11. Kitchen facilities. No issues.	Do you have COMPLETE kitchen facilities; that is, a sink with piped water, a range or cookstove, and a refrigerator. 0 Yes 0 No	Allocation 4.6 percent	
12. Taxes. No issues.	What were the real estate taxes on THIS property last year? |$ .00| OR 0 None Yearly amount--Dollars		

Item and Issue	1990 Recommendations	1980 Status	Comments
13. Insurance. What happens if "payment" is substituted for premium?	Use new version: What was the annual payment for fire, hazard, and flood insurance on THIS property? _____ |$ .00| OR 0 None Yearly amount--Dollars	Slight modification in wording	There was no difference in nonresponse nor in amounts reported using either the word "premium" or "payment". Therefore we recommend the use of "payment" in the question instead of premium because it is more generally understood, more familiar, and less technical than "premium."
14. Mortgage Could we replace the mortgage status questions by modifying the tenure question, that is, what would be the effect on reporting of total monthly mortgage payment?	Use 1980 version (tentative): Do you have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property? 0 Yes, mortgage, deed of trust, or similar debt) Go to H__ 0 Yes, contract to purchase) H__ 0 No--Skip to H___		We believe it is essential to retain these two mortgage questions. The median monthly mortgage payment decreases when these questions are omitted, especially for enumerator filled questionnaires. Also with the new tax law, we believe there will be substantially more second mortgages. We, therefore, propose asking the amount of the home equity loan or second mortgage. See item 18.

Item and Issue	1990 Recommendations	1980 Status	Comments
15. Amount of Mortgage No issues.	How much is your regular monthly mortgage payment on THIS property? Include payment only on first mortgage or contract to purchase. |$ .00 | Monthly amount--Dollars OR 0 No regular payment required-- Skip to H__		
16. Inclusion of taxes. No issues.	Does your regular monthly mortgage payment include payments for real estate taxes on THIS property? 0 Yes, taxes included in payment 0 No, taxes paid separately or taxes not required		
17. Inclusion of insurance. No issues.	Does your regular monthly mortgage payment include payments for fire, hazard, or flood insurance on THIS property? 0 Yes, insurance included in payment 0 No, insurance paid separately or no insurance		

Item and Issue	1990 Recommendations	1980 Status	Comments
18. Junior Mortgage	a. Do you have a second or junior mortgage or a home equity loan on THIS property? O Yes O No Skip to H__ b. How much is your regular monthly payment on all second or junior mortgages and all home equity loans? |$ .00 | Monthly amount--Dollars OR O No regular payment required		See Item 14.

Item and Issue	1990 Recommendations	1980 Status	Comments
19. Mobile home fees. Can we include mobile home costs?	Answer ONLY if this is a mobile home-- What was the total cost for personal property taxes, site rent, registration fees, and license fees on this mobile home and its site last year? (Exclude real estate taxes) |$ .00 | Yearly amount--Dollars		Nonresponse rate is about 22 percent for mobile homes and 10 percent for condominiums. Based on our experiences, we believe the fees are reasonable. One of the most important subjects in housing is the economic burden of obtaining shelter for American households. Mobile homes and condominiums are becoming a larger proportion of our housing each year. Despite these nonresponse rates, we think the data must be collected.
20. Condominium fees.	Answer ONLY if this is a condominium-- What is the monthly condominium fee? |$ .00| Monthly amount--Dollars		

Sample - continued page 11

Item and Issue	1990 Recommendations	1980 Status	Comments
21. Farm residence No issue	a. If you live in an apartment building, skip to H__. Is this house on less than 1 acre? 0 Yes - Skip to H__ 0 No b. In 1989, what were the actual sales of all agricultural products from this property? 0 None 0 $1 to $999 0 $1,000 to $2,499 0 $2,500 to $4,999 0 $5,000 to $9,999 0 $10,00 or more		

Tested Items Not Included in 1990

Roster of Vehicles Miles driven	These items were placed on the NCT to obtain information on the feasibility of data collection in a mail survey. The items were under consideration for inclusion in the supplemental sample survey. Preliminary data show the Roster of Vehicles question obtains a distribution of motorized vehicles similar to that obtained from the 1983 National Personal Transportation Survey. The Miles Driven question seems to show substantial problems with response--a 16 percent nonresponse rate as well as apparently inconsistent responses.
Smoke Detectors	Collectible but our best judgement indicates that there isn't enough interest in this item.

1980 Inquiries Not Proposed for 1990

Access Units at address Stories in structure/elevator Cooking fuel Bathrooms Air conditioning	These items are less used than the proposed items. There was very little disagreement at our Content Outreach meetings when we suggested deleting them.
Autos/van and trucks (combined into one)	Most participants at outreach content meetings agreed to this proposal.

BUREAU OF THE CENSUS

Responses to Questions
from Senator Jeff Bingaman

QUESTION 1. A major problem in recent years regarding the census has been that of census undercounting. This problem has been particularly serious in the Hispanic community and with other minority groups. The issue of census undercount is very important, for the inaccurate assessment of the true population of a town or city can have serious consequences for those communities' ability to receive federal funds.

Many have suggested that this undercount results from basic distrust in the Hispanic community, and indeed, with other minority groups, of both the makeup and the eventual use of the questions on the questionnaire. Can you tell this subcommittee what steps are being taken to encourage Hispanics and other minorities to accurately complete the questionnaire and take part in the census process?

ANSWER: Our efforts to encourage Hispanics and other minorities to complete the questionnaire accurately began in the early stages of planning the 1990 census. The Census Bureau has included representatives from Hispanic and other minority groups in continuing discussions concerning the development of the content of the questionnaire. We also have received considerable counsel from a wide range of minority communities concerning the implementation of educational and awareness activities designed to promote cooperation with the census. We will maintain these continuing contacts at the national, regional and local levels through our headquarters staffs and through our Community Awareness Specialists. We expect that the representatives of minority communities with whom we have been working will also apply their influence in urging their constituents to participate in the census and complete the questionnaire accurately.

Under the guidance of the Secretariat for Hispanic Affairs, U. S. Catholic Conference, we are working with the Ad Hoc Committee for Hispanic Affairs, Committee of the National Conference of Catholic Bishops. We will participate in the activities of the grass roots organizational structure of the Catholic church "Encuentro". These efforts concentrate on the unique problems of many subgroups within the Hispanic community. The church can suggest innovative ways to help in counting the members of these communities. Additionally, the credibility of the church will provide the best conduit for discussions on the confidentiality of the Census.

In addition to working through others, the Census Bureau will conduct a mass media campaign (national and local media), which includes non-English media (for example, Spanish TV and radio programming and foreign language newspapers), that is designed to communicate the basic message that the census is important, that it is safe, and that it is basically easy to participate. We are planning to have special television programming, after questionnaires are delivered, that will assist the public in completing the census forms. We plan to provide telephone assistance (including assistance for non-English speaking respondents) for those who need it as well as "walk-in assistance" in selected locations of

hard-to-enumerate areas. We will provide Spanish-language questionnaires for those who request them.

QUESTION 2. There has also been much discussion regarding the possible bias of some of the questions on the questionnaire. These questions are stated in such a way that they may discourage minority groups from fully responding to the questionnaire. Are you aware of any such questions which you feel are unfairly biased against Hispanics or other minority groups? What is being done to eliminate or modify these questions so that all citizens will feel free to fully respond to the census?
ANSWER: We are not aware of biases associated with any of the census questions that might discourage members of minority groups from fully responding. It would be counterproductive for us to include language in the questionnaires that might engender resistance because of inappropriate wording or negative perceptions about the intent of the questions.

With respect to the minority communities, our greatest tasks include motivating participation in the census and urging thorough completion of our questionnaires. For these reasons, we have developed a comprehensive outreach program that includes, but is not limited to:

(1) A motivational mailing to primarily non-English-speaking areas to alert residents to the imminent arrival of their census forms and to publicize the availability of the Spanish questionnaires and telephone assistance in a variety of languages.

(2) A motivational message included in all questionnaire mailing packages highlighting the confidentiality of census responses.

(3) Community-outreach programs aimed at national and local grass-roots organizations with strong influence in minority communities.

(4) Educational programs for school-age children.

(5) An extensive national publicity and advertising campaign.

CENSUS BUREAU

Responses to Questions
from Congressman Mervyn Dymally

QUESTION 1. In the 1980 census, the Bureau did not code all open-ended questions. Therefore, these data were not captured into the computer files or tabulated. With respect to the write-in categories the Bureau plans to include on the 1990 questionnaires, how will this data be captured and tabulated?

ANSWER: We plan to computer capture and then code the write-in data only on the sample questionnaires using an automated coding system for the majority of the coding and using clerical coding for the out-of-range and hard-to-code entries. These plans include write-in entries for industry and occupation, place of work, place of birth, migration, and other write-ins such as race, Spanish/Hispanic, ancestry, and language. We will tabulate these items, along with others, in census publications.

We considered the timing, cost, and complexities of coding each of the race and Spanish/Hispanic items on a 100-percent basis, but decided not to pursue the coding because of cost factors (in excess of $10 million); the absence of legal or other compelling needs for such data; and timing considerations (complexities associated with coding would cause substantial delay in producing all data products).

QUESTION 2. The Bureau has received many requests to include information on the 1990 questionnaire. How has the Bureau ensured that the information requested is not available from other data sources?

ANSWER: The Census Bureau has consulted with Federal, state, and local representatives across the Nation, and we have ascertained that all data that will be obtained from the 1990 census are not available from other sources. The greatest use of census data is for small geographical areas or for numerically small populations. A census is the only statistically reliable source for information of this nature.

QUESTION 3. The Bureau has included a new topic for 1990 called congregate housing. Has the Bureau determined whether this information is available from other sources? Has the question on congregate housing been tested? If so, what was the response rate?

ANSWER: This information, which is extremely important for our elderly and handicapped population, is not available from any other source. Identifying units that have an extra charge for meals will enable us to improve the rent statistics for the Department of Housing and Urban Development's Fair Market Rent Program. We do not know of any comprehensive list for all jurisdictions. Furthermore, even when local lists provide a statement that meals are mandatory or optional, there are no statistical summaries of the characteristics of the

population living in those units. The question on meals included in rent was tested in the 1986 National Content Test and, of those eligible to respond, 94.1 percent did. We are planning to test this question in the Special Urban Survey that will begin enumeration in June 1987. We intend to add approximately 400 units that we have identified as having meals included in the rent to see if respondents answer the question correctly. In addition, we are proposing to OMB a content reinterview that will allow us to see if the question is eliciting correct answers.

QUESTION 4. The Bureau has proposed including questions on housing quality on the sample form. We understand that questions on this topic were considered and rejected for the 1980 census. How did the Bureau derive a definition of substandard housing around which questions could be formulated? Does the Department of Housing and Urban Development think this data will be reliable?

ANSWER: The Census Bureau has not defined substandard. The American Housing Survey (AHS) includes a series of items that, in combination, are used by the Department of Housing and Urban Development to describe housing with moderate or severe deficiencies. The two items that we proposed to test for possible inclusion were "holes in the floor" and "breakdowns in heating equipment." These two items were selected because independent research suggested that they most nearly approximated the results obtained by using the entire AHS quality series. Staff from the Department of Housing and Urban Development would support their inclusion because they believe these items would help identify structurally deficient or "bad" housing.

The OMB has denied approval of these questions on the Special Urban Survey and on the Housing Content Reinterview for the 1987 Census of North Dakota. Accordingly, and in the absence of any test programs on these items, it is most likely that we will not request their inclusion in the 1990 census.

QUESTION 5. One data topic frequently questioned concerns the need for the questions on sources of income. Is this data available from other sources? How reliable is the data collected? How does the Bureau plan to improve the high non-response rate to the income questions?

ANSWER: Some of the detailed source of income data is available from tax returns. Many persons receive such small amounts that they are not required to file an income tax return. Others receive income from sources, such as social security benefits, veterans' payments, unemployment compensation, or public assistance benefits. These types of income are not taxable and, therefore, are not reported on income tax returns. Collecting income data from these persons is especially important in the measurement of the number of persons in poverty. Also, information is not available from tax returns on characteristics such as age, race, sex, educational attainment, and occupation of persons with these income sources, but it is available from the census. In addition, tax return statistics are not available for many geographic areas, such as places and census tracts.

In the 1980 census, our research showed that total aggregate income for the United States was underreported by approximately 5 percent in comparison with benchmark amounts derived from independent sources, such as the Bureau of Economic Analysis, the Social Security Administration, the Veterans Administration and so forth. The national income nonresponse rate in the 1980 census was 11.5 percent for persons 15 years old and over, slightly lower than the corresponding 12.5 percent for individuals in the 1970 census. We hope to maintain these nonresponse levels in 1990 with effective promotion of the importance of the 1990 census data and intensive field follow-up of income nonrespondents. Nonresponse rates in the census are generally much lower than surveys conducted by other Federal agencies, private groups, universities, and so forth.

QUESTION 6. Why is it necessary to ask a 100-percent question on the number of units in structure, when this information is obtained by the Bureau during the pre-list operations? How reliable is the data collected from this question (i.e., I do not know how many units are in my apartment building)?

ANSWER: "Units in structure" is one of the principal components of the housing unit inventory and is very important at the block level. The prelist operation does not collect the number of units in structure; rather it can only provide a count of "units at address." These data are not the same because some structures have more than one address and some street addresses may cover more than one structure. Throughout all our data user meetings, especially the Local Public Meetings, one of the main criticisms was that the 1980 item "units at address" was not the proper item to collect at the block level, rather the need is for "units in structure." Evaluations of the last two censuses suggest these data can be collected with accuracy. The units-in-structure item had an allocation rate of 7.8 percent in 1980. The respondents need not know the precise number of units in the building because the data we collected are in ranges. Our statistical measures show that respondents answer this question well.

American Planning Association
1776 Massachusetts Ave. NW
Washington, DC 20036
Phone 202 872 0611

STATEMENT OF

JOHN C. McCLAIN, AICP

on behalf of the

AMERICAN PLANNING ASSOCIATION

Before a Joint Hearing of the

FEDERAL SERVICES, POST OFFICE AND CIVIL SERVICE SUBCOMMITTEE

of the

SENATE GOVERNMENTAL AFFAIRS COMMITTEE

and the

CENSUS AND POPULATION SUBCOMMITTEE

of the

HOUSE POST OFFICE AND CIVIL SERVICE COMMITTEE

on

HOUSING BLOCK DATA IN THE 1990 CENSUS

MAY 14, 1987

CHAIRMAN PRYOR, CHAIRMAN DYMALLY AND MEMBERS OF THE SENATE FEDERAL SERVICES, POST OFFICE AND CIVIL SERVICE SUBCOMMITTEE AND THE HOUSE POST OFFICE AND CIVIL SERVICE SUBCOMMITTEE:

MY NAME IS JOHN C. McCLAIN. I AM THE DIRECTOR OF METROPOLITAN DEVELOPMENT AND INFORMATION RESOURCES FOR THE METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS IN WASHINGTON, D.C. AND SERVE AS THE CONTACT PERSON FOR THE DISTRICT OF COLUMBIA STATE DATA CENTER FOR THE BUREAU OF THE CENSUS. IN MY POSITION WITH THE COUNCIL OF GOVERNMENTS, I AM RESPONSIBLE FOR DIRECTING AND COORDINATING THE REGIONAL PLANNING ACTIVITIES OF THE LOCAL GOVERNMENTS OF THE WASHINGTON METROPOLITAN AREA, AND AM INTIMATELY FAMILIAR WITH THEIR USES OF CENSUS INFORMATION IN THEIR DEVELOPMENT OF PLANS AND PROGRAMS FOR THE COMMUNITIES OF THE WASHINGTON METROPOLITAN AREA

LOCAL AREA NETWORK.

"

I AM A MEMBER OF THE AMERICAN PLANNING ASSOCIATION AND PAST PRESIDENT OF ITS LOCAL CHAPTER, THE NATIONAL CAPITAL AREA CHAPTER. I AM ALSO A MEMBER OF THE ARLINGTON PLANNING COMMISSION.

I AM TESTIFYING ON BEHALF OF THE AMERICAN PLANNING ASSOCIATION THIS MORNING. I RESPECTFULLY REQUEST THAT THE COMPLETE TEXT OF MY PREPARED STATEMENT BE INCLUDED IN THE HEARING RECORD.

THE AMERICAN PLANNING ASSOCIATION IS A NATIONAL ORGANIZATION OF 21,000 MEMBERS, INCLUDING PUBLIC AND PRIVATE PLANNERS AND ELECTED AND APPOINTED OFFICIALS AT ALL LEVELS OF GOVERNMENT AS WELL AS EDUCATORS, STUDENTS AND INTERESTED CITIZENS. OUR MEMBERS BELONG TO 45 CHAPTERS COVERING EVERY STATE AND CONGRESSIONAL DISTRICT.

APA WAS FORMED IN 1978 WHEN THE AMERICAN INSTITUTE OF PLANNERS, ESTABLISHED IN 1917, AND THE AMERICAN SOCIETY OF PLANNING OFFICIALS, FOUNDED IN 1934, CONSOLIDATED. THE ASSOCIATION'S PRIMARY OBJECTIVE IS TO ADVANCE THE ART AND SCIENCE OF PLANNING FOR THE IMPROVED DEVELOPMENT OF THE NATION AND ITS COMMUNITIES, STATES AND REGIONS. WITHIN APA IS THE AMERICAN INSTITUTE OF CERTIFIED PLANNERS WHICH FOCUSES

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ON PROFESSIONAL DEVELOPMENT, OF WHICH I AM A MEMBER. MEMBERS OF AICP ARE DISTINGUISHED BY HAVING MET EXPERIENCE REQUIREMENTS AND HAVING PASSED AN EXAMINATION ON PLANNING PRINCIPLES AND PRACTICES.

IN SPEAKING FOR THE AMERICAN PLANNING ASSOCIATION, I WILL FOCUS ON PLANNERS' NEED AND RELIANCE ON THE FOLLOWING HOUSING DATA AT THE BLOCK LEVEL TO BE INCLUDED IN THE 100% COUNT:

- NUMBER OF HOUSING UNITS AT ADDRESS (OR IN STRUCTURE)
- NUMBER OF ROOMS IN UNIT
- COMPLETE PLUMBING FACILITIES
- TENURE (WHETHER THE UNIT IS OWNED OR RENTED)
- CONDOMINIUM STATUS
- VALUE OF CONDO OR HOME
- AMOUNT OF MONTHLY RENT
- FARM AND OTHER COMMERCIAL PROPERTIES AT ADDRESS (WHETHER THE HOME IS ON TEN OR MORE ACRES OR WHETHER IT CONTAINS A COMMERCIAL OR MEDICAL FACILITY)

MANY COMMUNITY DECISIONS AFFECTING THEIR ECONOMIC AND SOCIAL WELL-BEING AND THEIR PUBLIC AND PRIVATE ACTIVITIES ARE BASED ON HOUSING DATA. WE THEREFORE FELT IT WAS IMPORTANT TO DOCUMENT THIS NEED BY SOLICITING INFORMATION ON THE SUBJECT FROM SOME OF OUR MEMBERS SINCE PLANNERS ARE DEEPLY INVOLVED IN ASSISTING THEIR COMMUNITIES WITH RESOURCE ALLOCATION DECISIONS.

WE OBTAINED SOME 30 RESPONSES FROM 17 STATES. RESPONSES WERE OBTAINED FROM MEMBERS EMPLOYED AT ALL LEVELS OF GOVERNMENT AS WELL AS IN THE PRIVATE SECTOR.

WE ASKED OUR MEMBERS THE FOLLOWING QUESTIONS: HOW DOES YOUR COMMUNITY USE THE 100% BLOCK DATA, HOW FREQUENTLY IS THAT DATA USED, AND HOW CRITICAL IS THE DATA FOR COMMUNITY DECISIONS?

WE ALSO ASKED THEM WHY THE 100% BLOCK DATA SHOULD **NOT** BE LIMITED TO THE 20% SAMPLE.

LET ME NOW SHARE THE INFORMATION WE OBTAINED. IN MANY INSTANCES, I SHALL USE THE ACTUAL WORDS OF OUR MEMBERS.

FIRST, ON THE USES OF THE 100% BLOCK DATA FOR LOCAL HOUSING AND HOUSING-RELATED ACTIVITIES.

ALMOST ALL OF OUR MEMBERS CONSIDER THE ELIMINATION OF THIS DATA TO BE A MISTAKE SINCE THEY AND THEIR COMMUNITIES USE THE DATA TO DEVELOP AND PURSUE LOCAL HOUSING PROGRAMS AND STRATEGIES.

THE DATA ARE USED IN VARIOUS LOCAL RENTAL HOUSING ADMINISTRATION FUNCTIONS AND ENFORCEMENT PROCEDURES, AS IN THE CITY OF WHITE PLAINS, NEW YORK, WHICH USES IT IN ITS ADMINISTRATION OF THE NEW YORK STATE EMERGENCY TENANT PROTECTION ACT AND IN THE REPORTING OF NEW HOUSING OPPORTUNITIES, INCLUDING SECTION 202 SENIOR CITIZEN ASSISTED HOUSING PROJECTS. THIS SAME CITY REPORTS THAT THIS DATA ARE "ALSO THE BASIS FOR RENT ADMINISTRATION FEE PROTESTS FROM LOCAL LANDLORDS."

IN ADDITION TO HOUSING PROGRAMS, THE DATA ARE USED FOR PLANNING PURPOSES. FOR EXAMPLE, IN THE CITY OF PULLMAN, WASHINGTON, THE NUMBER OF HOUSING UNITS IN THE STRUCTURE IS USED TO CHECK DENSITY LIMITS IN THE

CITY'S COMPREHENSIVE PLAN AND ZONING REGULATIONS AND TO GET AN INDICATION OF OVERCROWDING.

OTHERS HAVE INDICATED THAT THE DATA PROPOSED FOR ELIMINATION ARE "INVALUABLE INDICATORS OF A NEIGHBORHOOD'S HEALTH" AND THAT "ONLY THE BLOCK LEVEL DATA (100% COUNT) PROVIDE THE TYPE OF GEOGRAPHIC DETAIL NECESSARY TO CONDUCT STUDIES AND PROGRAMS AT THE NEIGHBORHOOD LEVEL," ACCORDING TO THE DEPARTMENT OF HUMAN SERVICES, CITY OF COLUMBUS, OHIO.

FOR COMPARISONS WITHIN A REGION, ACCORDING TO THE DENVER EMERGENCY HOUSING COALITION, CENSUS DATA HAS "THE ADVANTAGE OF BEING CONSISTENT AND DIRECTLY COMPARABLE FROM CITY TO CITY, FROM NEIGHBORHOOD TO NEIGHBORHOOD."

OUR SECOND MAJOR POINT IS THAT THE 100% BLOCK DATA ARE WIDELY USED FOR NON-HOUSING PLANNING ACTIVITIES: ACCORDING TO THE INFORMATION WE RECEIVED FROM OUR MEMBERS, THE DATA IN QUESTION ARE USED IN TRANSPORTATION PLANNING, SPECIFICALLY IN TRANSIT ROUTE ANALYSIS

FOR NEW PUBLIC BUS SYSTEMS, IN FORECASTING REGIONAL TRAVEL, IN INTERCHANGE ANALYSES AND IN TRANSPORTATION CORRIDOR STUDIES.

THE SANTA BARBARA COUNTY-CITIES AREA PLANNING COUNCIL USES THE "NUMBER OF HOUSING UNITS AT ADDRESS OR IN STRUCTURE TO DETERMINE REGIONAL AVERAGE DAILY TRIPS, DAILY VEHICLE MILES TRAVELED AND TRIP GENERATING CHARACTERISTICS" IN BOTH TRANSPORTATION AND AIR QUALITY PLANNING EFFORTS.

THE DATA ARE ALSO USED IN PLANNING FOR COMMUNITY FACILITIES, FOR WATER AND SEWER IMPROVEMENT AND FOR UTILITIES. IN McHENRY COUNTY, ILLINOIS, "THE MATERIAL IS USED ON AN ONGOING BASIS AS WELL AS FOR SPECIAL PROJECTS AND IS NECESSARY TO PROVIDE CHARACTERISTICS OF SERVICE AREAS AND DISTRICTS (LIBRARY, SCHOOL, FIRE) FOR WHICH THE CENSUS PROVIDES NO GEOGRAPHIC EQUIVALENT."

THE METROPOLITAN COUNCIL IN ST. PAUL, MINNESOTA, USES THIS DATA FOR PRODUCING ANNUAL SMALL AREA POPULATION ESTIMATES. THESE IN TURN ARE USED FOR A WIDE RANGE OF PLANNING ACTIVITIES.

IN LAKE COUNTY, ILLINOIS, THE "VALUE OF CONDOMINIUM OR HOME" AND THE "AMOUNT OF MONTHLY RENT" ARE USED BY PERSONS AND BUSINESSES ENTERING A NEW AREA TO EVALUATE BUSINESS SITES.

TO SUMMARIZE THE VALUE OF THESE DATA, AS ONE OF OUR MEMBERS SAID, "THE EFFECTIVE TARGETING OF SCARCE LOCAL RESOURCES IS MADE POSSIBLE BY BLOCK LEVEL STATISTICS."

AT THE STATE LEVEL AND IN MANY PRIVATE ACTIVITIES, THE 100% BLOCK DATA HAVE PROVEN INVALUABLE.

THE CITY OF PENSACOLA, FLORIDA, NOTED THAT THE STATE OF FLORIDA GROWTH MANAGEMENT ACT OF 1985 DIRECTS EVERY LOCAL GOVERNMENT TO UPDATE THEIR CURRENT COMPREHENSIVE PLAN. THE HOUSING ELEMENT DATA REQUIREMENTS ARE QUITE INVOLVED AND INCLUDE THE USE OF THE VERY INFORMATION MENTIONED EARLIER, WHICH, AT ONE TIME WERE CONSIDERED FOR ELIMINATION.

THE DATA ARE USED IN PRIVATE PLANNING INITIATIVES, SPECIFICALLY (AS IN KING COUNTY, WASHINGTON) FOR MARKET RESEARCH, AND BY NONPROFIT

ORGANIZATIONS, SUCH AS THE WHITE PLAINS HOUSING INFORMATION SERVICE WHICH AS ITS EXECUTIVE DIRECTOR NOTED, "DEPEND[S] ON THIS INFORMATION TO MONITOR THE STATUS OF HOUSING IN THE NEIGHBORHOODS WE SERVE.'" IT IS ALSO USED IN THE PREPARATION OF GRANT APPLICATIONS TO FOUNDATIONS AND OTHER PRIVATE SECTOR FUNDING ACTIVITIES, AS BY THE CITY OF DULUTH, MINNESOTA.

ACCORDING TO ONE OF OUR MEMBERS WHO WORKED IN SEVERAL SMALL COMMUNITIES IN THE RURAL SOUTHERN UNITED STATES, SMALL COMMUNITIES ALSO MAKE USE OF THE DATA "TO ATTRACT PRIVATE SECTOR INVESTMENT IN HOUSING . . . . WITHOUT SUCH DATA, PRIVATE CONCERNS SOMETIMES OVERLOOK SMALL COMMUNITIES, OR (WORSE) PROPOSE DEVELOPMENT THAT MAY BE OUT OF CHARACTER WITH THE COMMUNITY . . . . THE DATA, BECAUSE IT IS PERCEIVED TO COME FROM AN UNBIASED SOURCE, ENABLE LOCAL OFFICIALS TO MORE ACCURATELY EVALUATE A PROPOSAL THAN IF IT WERE BASED ONLY ON THE DEVELOPER'S OWN DATA."

THE CITY OF ROCKY MOUNT, NORTH CAROLINA, RECEIVES MONTHLY INQUIRIES FOR THE DATA IN QUESTION FROM INVESTORS, BANKING INSTITUTIONS

AND DEVELOPERS, FOR USE IN PREPARATION OF MARKET STUDIES FOR NEW CONSTRUCTION.

AS TO THE FREQUENCY OF USE OF 100% HOUSING BLOCK DATA, SOME OF OUR MEMBERS RESPONDED THAT THEY USE IT ON A DAILY BASIS AND THAT CITY AGENCIES SUCH AS DEPARTMENTS OF COMMUNITY DEVELOPMENT, RECEIVE REQUESTS FROM THE PRIVATE SECTOR AT LEAST MONTHLY.

ANOTHER APA MEMBER REPORTED THAT THE DEPARTMENT OF HUMAN SERVICES FOR THE CITY OF ALBUQUERQUE, NEW MEXICO MAY USE THE BLOCK LEVEL DATA INTENSIVELY FOR A SHORT PERIOD OF TIME, BUT ON AN AVERAGE, THE DATA ARE USED ABOUT THREE TIMES A YEAR. THE ALAMEDA COUNTY PLANNING DEPARTMENT IN HAYWARD, CALIFORNIA RECEIVES REQUESTS FROM THE PUBLIC FOR THIS DATA ON THE AVERAGE OF THREE OR FOUR TIMES A WEEK.

A HOUSING PLANNER WITH THE CITY OF ALBUQUERQUE'S DEPARTMENT OF HUMAN SERVICES, APTLY POINTS OUT THAT "MORE IMPORTANT THAN THE FREQUENCY OF USE IS THAT THERE IS NO SUBSTITUTE FOR THIS INFORMATION."

THE DIRECTOR OF PLANNING FOR BALTIMORE, MARYLAND SUMS UP THE SENTIMENT OF APA'S MEMBERS: "WE MAKE CONTINUOUS USE OF CENSUS DATA IN A MYRIAD OF PLANNING AND POLICY STUDIES. . . . IT WOULD BE A VERY GREAT HARDSHIP . . . IF . . . [THE] NUMBER OF DWELLING UNITS AT AN ADDRESS, NUMBER OF ROOMS PER UNIT, AND PLUMBING FACILITIES WERE DROPPED FROM THE 100% BLOCK LEVEL COUNTS."

HOW CRITICAL IS THE 100% HOUSING BLOCK DATA?

HERE ARE SOME TYPICAL RESPONSES:

- THE DATA ARE USED (AS IN KING COUNTY, WASHINGTON) TO DENOTE WHICH AREAS HAVE CONCENTRATIONS OF LOW-INCOME YOUTH, FEMALE-HEADED HOUSEHOLDS AND SENIOR CITIZENS. THE RESULTANT COMMUNITY DEVELOPMENT NEEDS ASSESSMENT IS USED TO IDENTIFY WHICH AREAS IN THE COUNTY NEED ASSISTANCE.

- "THIS IS CRITICAL DATA [FOR McHENRY COUNTY, ILLINOIS]; ELIMINATING IT WOULD CREATE AN INCOMPLETE DATA BASE AND A LOSS OF CONTINUITY FROM PREVIOUS CENSUSES."

- "THE ABSENCE OF AN ACCURATE BASE WILL SIGNIFICANTLY AFFECT THE ACCURACY OF ANNUAL SMALL AREA POPULATION ESTIMATES. THIS PARTICULARLY AFFECTS THE WORK OF THE [ST. PAUL, MINNESOTA] METROPOLITAN COUNCIL AND MANY OTHER GOVERNMENTAL UNITS THAT MUST PREPARE POPULATION ESTIMATES."

- "THE DATA ITEMS UNDER DISCUSSION [ACCORDING TO THE CAPE MAY COUNTY PLANNING BOARD, NEW JERSEY] WERE CRITICAL FOR OUR COUNTY IN IDENTIFYING TARGET AREAS FOR SEVERAL CRITICAL GRANT PROJECTS IN THE COUNTY."

- "SMALL TOWNS AND RURAL COUNTIES [IN WASHINGTON STATE] PARTICULARLY RELY ON THE FEDERAL CENSUS FOR ACCURATE HOUSING DATA. WE SIMPLY DO NOT HAVE THE LOCAL RESOURCES TO COLLECT THE DATA, PARTICULARLY IN LIGHT OF CONTINUING CUTBACKS IN REVENUE SHARING [WHICH HAS SINCE BEEN ELIMINATED] AND COMMUNITY DEVELOPMENT BLOCK GRANT FUNDING." (SOURCE: PULLMAN, WASHINGTON AND DEPARTMENT OF RURAL SOCIOLOGY, WASHINGTON STATE UNIVERSITY.)

- TO SUMMARIZE THIS POINT, SEVERAL RESPONDED THAT THERE IS NO OTHER KNOWN ACCURATE SOURCE FOR SOME OF THE ITEMS AT THE BLOCK LEVEL.

WHY SHOULD THE 100% BLOCK DATA **NOT** BE LIMITED TO THE SAMPLE?

HERE ARE SOME REPRESENTATIVE ANSWERS FROM APA MEMBERS:

- LAKE COUNTY DEPARTMENT OF PLANNING, ZONING AND ENVIRONMENTAL QUALITY, WAUKEGAN, ILLINOIS RESPONDED THAT "WHENEVER A PIECE OF PREVIOUSLY COLLECTED DATA IS REMOVED OR CHANGED IN THE CENSUS, IT MAKES TREND COMPARISON HARDER. BY SHIFTING SOME INFORMATION TO A SMALLER SAMPLE BASE, THE DATA WOULD BECOME SOMEWHAT INCOMPARABLE WITH PAST CENSUSES BECAUSE OF DATA CONTINUITY PROBLEMS."

- THE WHITE PLAINS, NEW YORK HOUSING INFORMATION SERVICE NOTED THAT THERE IS A "SERIOUS UNDERREPORTING AS IT IS AMONG LOWER INCOME HOUSEHOLDS. THEREFORE, THE LARGER THE SAMPLING, THE MORE ACCURATE THE INFORMATION." AND "SHOULD THIS

INFORMATION BE REQUESTED FROM ONLY 20% OF THE RESPONDENTS, ITS ACCURACY WILL BE SKEWED EVEN FURTHER WHEN UNDERREPORTING IS FACTORED IN."

- THE MONMOUTH COUNTY PLANNING BOARD, FREEHOLD, NEW JERSEY RESPONDED THAT "THE END RESULT OF THE ELIMINATION OF CERTAIN BLOCK LEVEL HOUSING DATA FROM THE SHORT FORM WOULD BE LESS ACCURATE HOUSING INFORMATION AND AN INABILITY ON THE PART OF THE PLANNING BOARD TO PROPERLY SERVE THE PUBLIC'S NEEDS."

- THE CITY OF DULUTH, MINNESOTA STATED THAT ". . . THE CITY'S NEED FOR DETAILED, ACCURATE STATISTICS IS GREAT AND CANNOT BE MET THROUGH SAMPLE, BROAD AREA DATA."

- THE JOINT PLANNING COMMISSION, LEHIGH-NORTHHAMPTON COUNTIES, ALLENTOWN, PENNSYLVANIA NOTED ". . . THE REDUCTION IN SAMPLE SIZE FOR BASIC HOUSING WILL . . . NEGATE THE EXPECTED UTILITY OF THE NEW, RURAL AREA BLOCKS WHICH ARE BEING DESIGNATED FOR THE 1990 CENSUS. IT IS PRECISELY IN THOSE AREAS

WHERE A 1 IN 5 SAMPLE IS NOT RELIABLE, VERSUS A 1 IN 5 SAMPLE TAKEN IN A MORE POPULOUS AND HOMOGENEOUS INNER CITY BLOCK."

THE PROPOSED DATA REDUCTIONS WOULD "SET A PRECEDENT FOR REDUCING THE SAMPLE SIZE AND ACCURACY FOR OTHER U.S. CENSUS ITEMS (I.E., POPULATION CHARACTERISTICS IN THE 1990 'COMPLETE COUNT') WHICH ARE FUNDAMENTAL TO LOCAL PLANNING BY GOVERNMENT, BUSINESSES, SOCIAL AGENCIES AND OTHERS."

- WESTCHESTER COUNTY IN NEW YORK STATED THAT "SINCE INCOME DATA ARE NOT AVAILABLE AT THE BLOCK LEVEL, THE INFORMATION ON THE VALUE OF OWNER OCCUPIED HOUSING, AND RENTS PAID IS A GOOD INDEX OF LOCAL INCOME. THIS DATA HAVE BEEN USEFUL TO BOTH THE COUNTY AS WELL AS MUNICIPALITIES IN DEVELOPING SMALL AREA ECONOMIC PROFILES THAT WOULD OTHERWISE NOT BE AVAILABLE."

- THE CITY OF PHOENIX, ARIZONA EMPHASIZED THAT "[THERE] WOULD BE THE DELAY IN RECEIVING HOUSING INFORMATION . . . THERE WAS A CONSIDERABLE TIME LAPSE BETWEEN THE RELEASE OF SUMMARY TAPE FILE 1 AND SAMPLE DATA FROM THE LONG QUESTIONNAIRE IN

SUMMARY TAPE FILE 3, WHICH WOULD MEAN THAT THE 1990 HOUSING DATA WOULD BE DELAYED IN USE IN HOUSING STUDIES IF DELETED FROM THE COMPLETE COUNT."

- THE CITY OF DALLAS, TEXAS RESPONDED THAT "IF 100% DATA QUESTIONS WERE MOVED FROM THE SHORT FORM TO THE LONG FORM, IT WOULD DELAY THE PUBLICATION OF TIME-SENSITIVE INFORMATION; SEVERAL CRITICAL HOUSING VARIABLES WERE EXTREMELY TIME-SENSITIVE: VACANCY RATES, RENT LEVELS, AND MARKET VALUES."

- THE WILL COUNTY LAND USE DEPARTMENT IN ILLINOIS STATED THAT "UNFORTUNATELY, THERE IS NO ALTERNATIVE SOURCE TO OBTAIN THE DATA PROPOSED FOR SAMPLING. IT WOULD BE TRULY DISAPPOINTING TO SACRIFICE THE ACCURACY AND USEFULNESS OF THE '100%' RESPONSE IN ORDER TO SAVE A RELATIVELY SMALL SUM."

- THE CLEVELAND CENSUS STATISTICAL AREAS COMMITTEE, CLEVELAND, OHIO NOTED THAT " . . . HOUSING RELATED DATA ARE NEEDED FOR SMALL UNITS OF GEOGRAPHY. SOME CHARACTERISTICS, SUCH AS TENURE AND OCCUPANCY, ARE ABSOLUTELY CRITICAL AT THE LOCAL

LEVEL. IF REDUCING SAMPLE SIZES FOR SOME OF THESE QUESTIONS WOULD RESULTS IN NOT REPORTING THEM AT SMALL GEOGRAPHIES, OR IN GREATER SUPPRESSION, OR IN UNRELIABLE COUNTS, THEN THE CLEVELAND COMMITTEE AND DATA USERS IN GENERAL WOULD BE MOST DISPLEASED."

- ACCORDING TO ALAMEDA COUNTY, CALIFORNIA: "ALTERNATE SOURCES OF THESE DATA ARE NOT AVAILABLE, PARTICULARLY SINCE THEY ARE USED AS THE STARTING POINT IN ANY UPDATES OF THE DATA."

- THE DENVER, COLORADO EMERGENCY HOUSING COALITION RESPONDED THAT "A SHIFT FROM 100% DATA REPORTED ON A BLOCK BASIS TO SAMPLE DATA REPORTED ON A TRACT BASIS MIGHT BE A VIABLE ALTERNATIVE IN SOME AREAS, PARTICULARLY IN THE EASTERN U.S. WHERE TRACTS ARE RELATIVELY SMALL. HOWEVER, IN THE WEST, ONCE YOU MOVE OUTSIDE MAJOR METROPOLITAN AREAS, TRACTS ARE OFTEN VERY LARGE AND TRACT DATA IS OF LITTLE VALUE. ALSO, TRACT BOUNDARIES VERY OFTEN DO NOT COINCIDE WITH RECOGNIZED

NEIGHBORHOOD AND OTHER NON-PHYSICAL BOUNDARIES THAT HAVE DEFINITE IMPACT ON HOUSING CHARACTERISTICS."

OBVIOUSLY, OUR MEMBERS CONSIDER THIS DATA TO BE IMPORTANT TO THEIR COMMUNITIES. AS ONE RESPONDENT NOTED, "ANY MOVE TO DISCONTINUE THE COLLECTION OR PUBLICATION OF BLOCK LEVEL STATISTICS WOULD CRIPPLE OUR HOUSING, COMMUNITY AND ECONOMIC DEVELOPMENT ACTIVITIES AND OUR GROWTH MANAGEMENT PROGRAM IN KING COUNTY, WASHINGTON."

APA'S POSITION IS PERHAPS, BEST SUMMARIZED BY THIS COMMENT FROM THE LAKE COUNTY (ILLINOIS) DEPARTMENT OF PLANNING, ZONING AND ENVIRONMENTAL QUALITY:

"THE CENSUS IS ONE OF THE MOST ACCURATE DATA SOURCES AVAILABLE TO THE PUBLIC AND PRIVATE SECTORS AND IS USED FOR PLANNING, INVESTMENT, LOCATION AND MULTIPLE OTHER DECISIONS BY GOVERNMENTS, RESIDENTS, FUTURE RESIDENTS, BUSINESSES, EDUCATIONAL FACILITIES AND NUMEROUS OTHER ORGANIZATIONS. IT WOULD BE CAPRICIOUS TO JEOPARDIZE THE RELIABILITY OF IMPORTANT SEGMENTS OF THE DATA BY REMOVING QUESTIONS

FROM THE SHORT FORM. I KNOW OF NO OTHER SURVEY INSTRUMENT THAT IS SO WIDELY KNOWN AND UTILIZED."

MR CHAIRMAN, WE RECEIVED A COMMUNICATION ON TUESDAY, MAY 11TH, FROM JOHN G. KEANE, DIRECTOR OF THE BUREAU OF THE CENSUS. IN IT, HE THANKED THE AMERICAN PLANNING ASSOCIATION FOR THE EXPRESSION OF THE CONCERN OF THE PLANNING COMMUNITY ABOUT THE CONTENT OF THE 1990 HOUSING CENSUS 100% QUESTIONNAIRE AND HE INFORMED US THAT IN HIS MARCH 27, 1987 LETTER TO CHAIRMAN DYMALLY, HE HAD RECOMMENDED THAT THE EIGHT HOUSING ITEMS WE LISTED AS CRUCIAL BE INCLUDED AT THE 100% LEVEL.

WE THANK AND CONGRATULATE MR. KEANE AND HIS STAFF FOR THEIR OPEN AND THOROUGH REVIEW OF THE MATTER. WE APPLAUD HIS RECOMMENDATION TO CHAIRMAN DYMALLY. WE WOULD ALSO LIKE TO THANK GENE L. DODARO, ASSOCIATE DIRECTOR OF THE GENERAL ACCOUNTING OFFICE, FOR GAO'S SURVEY OF THIS MATTER.

WE HOPE THAT THE CONGRESS WILL PROVIDE THE NECESSARY SUPPORT TO CONTINUE THE COLLECTION AND ANALYSIS OF DATA THAT ARE SO ESSENTIAL TO PLANNING FOR OUR COMMUNITIES' SOCIAL AND ECONOMIC WELL-BEING.

THANK YOU FOR THE OPPORTUNITY TO EXPRESS THE VIEWS OF THE AMERICAN PLANNING ASSOCIATION ON THIS SUBJECT. WE WOULD BE DELIGHTED TO ASSIST THE SUBCOMMITTEES IN THIS IMPORTANT MATTER AND RESPOND TO YOUR QUESTIONS.

AMERICAN PLANNING ASSOCIATION

QUESTIONS FOR JOHN A. McCLAIN

from Senator David Pryor

1. *In your testimony, you have told us how important Census data is to local planners. Just recently a member of my staff received a 1987 Census update survey from a local county. The form says that since seven years have passed since the 1980 Census was taken, the local government needs up-to-date information for planning purposes. As decennial results become out-of-date, to what extent do planners use more current data to check the validity of decennial results in making planning decisions? How many counties or cities conduct surveys like this one between decennial Censuses?*

   The fundamental source of data for making planning decisions is the decennial Census. It provides the benchmark for all local data collection efforts for the period between Censuses, to the extent that there are additional data collected. Some local governments conduct inter-censal sample surveys to update some of the information for local planning decisions. These surveys rely on the last decennial Census as a base and primarily measure change since the Census.

   I do not know how many localities nationwide conduct these sample surveys. Within the Washington MSA which has approximately 20 major local governments, only two (Montgomery and Fairfax Counties) have conducted "Census Update type" sample surveys since the 1980 Census.

2. *Since the American Planning Association represents both public and private planners, do you think private planners would be willing to contribute to the cost of collecting, processing, and tabulating Census data?*

   Private sector planners certainly use the Census data for private sector decisionmaking, and it therefore is of value to them. The Census Bureau attempted to recover some of the costs of the 1980 Census through their charging system for tapes, publications, etc. I assume this will also be done for the 1990 Census, but I recommend that local governments and other non-profit organizations continue to receive the information at as low a cost as possible.

   At the current time, private planners, by purchasing Census information, are in fact contributing to the cost of its collection. From a practical perspective, I do not know how the private sector could participate in the collection phase of the Census.

3. *One of the subjects that the Bureau plans to include on the 1990 short form is a question about plumbing facilities in order to measure housing quality. The Bureau also is considering the inclusion of some additional housing quality questions on the long form, but has not yet specified what these questions will be. What questions do you think the Bureau should include on the long form to sample the quality of our nation's housing?*

From my own perspective, housing quality is subjective, has different meaning in different communities, and is therefore difficult to measure. APA is much more concerned that the 1990 Census retain the 100 percent count housing questions as included in my statement, that are quite objective in nature and upon which we rely to develop programs and make decisions.

4. *You have told us in your testimony how much professional planners and planning commissioners value 100 percent housing data. In order to better understand its application, please identify five of the most important government housing programs that use decennial housing data and provide a narrative explaining how the housing data collected on the short form is used in each of these cases.*

Housing programs use Census data in a variety of ways, including allocating program funds, determining entitlements, setting standards for participation, analyzing markets, evaluating programs, and researching housing problems and unmet needs. More specifically, the following programs use data elements from the "short form" of the decenniel Census:

A. Housing Programs Administered by the Farmers' Home Administration

The Section 502 Homeownership Program makes low interest direct loans to low income residents of rural areas for the purpose of purchasing homes. The Section 515 Rural Rental Program provides 50-year mortgages, direct loans for the construction or rehabilitation of rental housing in rural areas. By Federal law, both programs give priority to people in substandard housing. For the purposes of these programs, substandard housing is defined using Census data -- overcrowding (number of persons per room) and the availability of complete plumbing facilities. The number of persons per unit, the number of rooms per unit, and the availability of plumbing all come from the "short form."

B. Housing Programs Administered by the Department of Housing and Urban Development

a) Section 8/Rental Assistance

The Section 8 Program provides rental assistance to low income families and individuals. The funding formula used to determine Section 8/Rental Assistance allocations to localities includes population, poverty, housing overcrowding, vacancies, and substandard housing. For the purposes of this program, substandard housing is measured by the availability of complete plumbing facilities and the lack of complete kitchens. Population, housing overcrowding vacancies, and the availability of plumbing are all derived from the "short form."

b) Rental Rehabilitation Grants

The Rental Rehabilitation Program provides grants to local governments to facilitate the rehabilitation of private rental housing. The allocation formula used to determine fund distribution to localities includes the size of the low-income rental population, the extent of overcrowding of rental housing, and the extent of physical inadequacy of the housing stock, measured by the availability of plumbing and the lack of complete kitchens. Tenure, overcrowding, and the availability of plumbing are all derived from the "short form."

c) Community Development Block Grants (CDBG)

The CDBG Program provides grants to localities for their use in facilitating housing, community development, and economic development activities. Funds are allocated to entitlement cities and urban counties according to a formula that includes population, persons below poverty, and overcrowding (persons per room and persons per housing unit). Population and overcrowding are derived from the "short form."

AMERICAN PLANNING ASSOCIATION

QUESTIONS FOR JOHN A. McCLAIN

from Congressman Mervyn M. Dymally

1. *How have the changes in federal programs since 1980, such as the elimination of the General Revenue Sharing program, impacted the data needs of state and local planners?*

   The reduction in Federal funding from several programs (General Revenue Sharing, HUD-701, EDA-302, et al) have severely impacted the capacity of planning agencies and local governments to collect and analyze data for use in making planning and programming decisions. Within my own agency, for example, the planning staff that collects and analyzes data to inform the local government officials of the Washington area of needed facilities and services has declined from 14 to 5 since 1980. As a result, many of the data collection programs we formerly carried out to supplement the Census data have been eliminated. This means that local governments are making decisions on constructing public facilities and providing public services on less information.

2. *As you know, concerns have been raised about striking the proper balance between the need for housing and population data collected during the decennial Census, and the burden on the American public from responding to so many questions.*

   While your testimony sets forth the critical need for data by public and private sector planners, I would appreciate your addressing the concern that the Census questionnaires place too great a burden on the public.

   I do not believe that the Census questionnaire is too burdensome given the many benefits that accrue to the public because our government agencies have this information to build facilities and provide services. I can appreciate that some may feel the form to be a burden, and perhaps we need to do a better job of informing and educating the public of the benefits to them of the data.

3. *In line with the previous question, do you belive that alternative sources could be developed for some of the data you rely on, so that the Census forms are not so burdensome? Could Congress and the Executive Branch agencies be helpful in developing such sources?*

   I do not believe that there are any real alternatives to Census data. Some may think that non-Census data collection efforts carried out by some local governments might be an alternative to the Census, but in reality they only supplement the Census and generally only measure change since the Census. More importantly, these other data collection efforts are only done by a few local governments. There is an enormous economy of scale obtained in the data being collected by the Census Bureau.

4. *How satisfied are you that the data collected on housing -- such as the number of units in structure and the proposed questions on housing quality -- is accurate?*

   I have every confidence that the basic data collected on housing -- particularly the questions on the short form -- are extremely reliable. I would note, however, that I am somewhat dubious about the proposed questions on housing quality because it is subjective, inferred, and has different meanings in different communities.

The testimony of

Alan E. Farstrup, Ph.D.

representing the

INTERNATIONAL READING ASSOCIATION

before a joint oversight hearing of

THE SENATE SUBCOMMITTEE ON FEDERAL SERVICES,
POST OFFICE, AND CIVIL SERVICE

and

THE HOUSE SUBCOMMITTEE ON CENSUS AND POPULATIONS

on

U.S. Bureau of the Census Questionnaire Content for the 1990 Census

Chaired by:

SENATOR DAVID PRYOR

and

CONGRESSMAN

MERVGN M. DYMALLY

May 14, 1987

Mr. Chairman and members of the Senate Subcommittee on Federal Services, Post Office, and Civil Service and the House Subcommittee on Census and Populations, I am Alan Farstrup, Director of Research and Development of the International Reading Association. My experience is diverse, encompassing public school teaching, Peace Corps Volunteer in Afghanistan, university professor, educational researcher and consultant on matters of document comprehensibility to the courts as well as to agencies of the federal government. My involvement in reading and literacy includes classroom teaching, teacher education, currriculum development, and research. I have worked closely with young people and adults who cannot read adequately and who need the professional services made possible by local, state and federal programs designed to help non-readers or poor readers improve their abilities. My work at the International Reading Association engages me daily in efforts directed at encouraging literacy at all levels and in all settings.

The International Reading Association is a professional society of over 73,000 members and 1100 affiliate councils in all 50 states and in 36 nations worldwide. Our members can be found primarily in the U.S. and Canada, as well as in some 90 countries internationally. When affiliate members are included, the Association incorporates in excess of 250,000 members dedicated to the goals of literacy improvement and the advancement of knowledge about the reading and learning to read process. The Association and its members are dedicated to promoting the reading habit by working to improve reading and the teaching of reading through an extensive program of professional publications and conferences, and by working with many organizations and agencies to promote literacy at every possible level. Examples of such activities include grants and awards to exceptional teachers of reading, reading researchers and other outstanding leaders whose efforts promote improved levels of literacy. An important aspect of the Association's work is the promotion of reading research and the application of that knowledge to the needs of readers.

The Bureau of the Census performs a critical, constitutionally mandated task, a task that is most important to the progress of this nation and to the governmental process itself. The census needs to reflect the demographic status of the nation accurately, reaching every level and aspect of society. Of special concern is the fact that census data are an important factor in the identification of populations in need of compensatory educational services. Since these populations, by definition, are usually characterized by low level or non-existent reading skills it is critical that the census

process be designed to account for reading deficits among respondents.

It is significant that these hearings are designed in part to address the needs of the unskilled or non-reader confronted with the task of responding to the rather complex document that is the census questionnnaire form. I have been asked to respond to several specific aspects of the proposed 1990 census forms that relate to their clarity and comprehensibility. I will address the following issues in my testimony on behalf of the International Reading Association today:

1. What educational level does a person need in order to respond to the pilot 1990 census questionnaires?

2. Can the layout of the proposed questionnaires be improved to enhance their comprehensibility?

3. Are the instructions in the questionnaire clear to the average reader?

4. Can the questions themselves be stated more simply?

The first question deals with the level of education necessary in order to respond to the proposed questionnaire. The usual practice in assessing needed educational levels is to apply one of several widely accepted readability formulae in order to assess the estimated grade level readability of the materials. This process is not easily applied to materials such as the questionnaire at hand since it does not consist of large sections of connected text, thereby rendering formula based analysis procedures useless. An informal analysis of the questionnaire indicated that the respondent will need to read and recognize words most frequently appearing at the grade 7 or higher level. This was estimated by selecting a sample of words used in the proposed census form and then using the American Heritage Word Frequency Book (Houghton Mifflin, 1971) as a reference to assess the by grade level frequency of appearance of the selected words in a corpus of over 5 million words examined. Another word frequency reference, The Ginn Word Book for Teachers (Ginn & Co., 1983), offers a somewhat more optimistic perspective on the sample of words from the form that were examined. When checked in the Ginn Word Book the sample indicated that children who have completed grade 5 should have been given instruction in most of the words used in the proposed census form. That is, individuals who read at or above the fifth grade level have a high likelihood of being familiar with vocabulary found in the proposed census forms. Unfortunately, this assessment also indicates that poor readers (below the fifth grade level) or non-readers will have a lot of difficulty reading these questionnaires. An additional point to be made is that vocabulary frequency alone is not an adequate predictor of readability or comprehensibility, the

context in which the words appear is critical, as is the experience and knowledge of the reader. These forms prove difficult for skilled readers to interpret and would seem to present even greater difficulty to the marginal reader and be nearly insurmountable to the reader for whom English may be a secondary language.

The second question addresses the appropriateness of the layout and design of the census questionnaire in relationship to comprehensibility. The designers of the form are faced with a nearly insoluble problem that of reconciling the need for a comprehensive, accurate and unambiguous data collection instrument with the need for simplicity and clarity of language in order to meet the needs of a wide range of reading abilities. The proposed 1990 format is improved over that used in 1980, especially with regard to the use of a question and answer first page introductory format. Such a format has proven to be very useful to marginal readers who need to set a context, to establish a frame of reference for what they are about to do. Unfortunately, the language chosen for this introduction is quite official and legalistic in tone and may be unnecessarily difficult for many respondents. The basic approach taken here (cover page of form DC-1409) is sound an can be much improved through the use of everyday, somewhat less bureaucrataic forms of language. The remainder of the form utilizes a muliple column layout an manages to compress a great deal of information into a limited mumber of pages. The format is excellent with regard to the date collection and technical needs of the Census Bureau, it is - however - very difficult to use since the reader must work in both a vertical and horizontal reference mode, interrelating questions arrayed down the left side of the page with item information spead across the top of the page. The format is a very efficient way to capture a large amount of information. It is quite complex, howver, and the reader, especially the marginal reader, could be greatly helped by a simple worded description of the form, coupled with general instructions that would give a sense of the dverall format and purpose of the questionnaire. Beyond recommending clearer instructions with an overview it is difficult to recommend changes that would not materially weaken the data collection function of the form. A few general principle of layout can be cited that have proven to be helpful guides to writers of public information and data collection documents. These might be of assistance in a more detailed review of the propose forms. As a general rule document clarity is enhanced when:

- .legible, sans serif type fonts are used.
- .a typesize is selected adequate to the need of the visually impaired.
- .instructions are included which provide advance organizers to the reader, as well as detail about how to complete a form.
- .graphic elements are included, where appropriate, to key the reader to the context of materials to be read.

.language and vocabulary that is simple and familiar to the reader is used.
.open space is used to reduce the visual clutter on the page and lead the reader easily to the next point or item for consideration.

The third question addresses the question of istructions. Are the instructions provided to the reader clear and helpful to the average person? The instructions are set forth in a stepwise fashion that leads the reader logically through the form. It is difficult, visually, to locate and differentiate the instructions in relationship to the actual items to be completed. A change in typefont or ink color would make the instructions more evident to the reader. The use of shaded areas is a very effective way to highlight the instructions and should be continued. One potential problem is that the use of shading is also extended to the questionnaire items themselves, thereby reducing the distinction between the parts of the form that are istructional in nature and the parts that are questions to be answered. The use of consistent design elements to clearly identify the different components of the form would greatly help the reader. This redesign, coupled with the addition of a simply written overview of what the respondent has to do to complete the form will make a much improved form even better. It is important to note, however, that even with the best effort at design and the simplification of language, many respondents will be unable to complete the form without assistance. It would seem important to provide a mechanism whereby the respondent could request assistance with the form when appropriate.

The fourth area of concern is related to the questions found on the census form. Are they simply enough stated to allow the average reader to respond correctly. The review of the questionnaire indicated that a reader of a average ability, given the motivation to carefully complete the form, will be able to respond to the questions. The poor reader, below the fifth grade level, will have considerable difficulty with many of the items since the terms used are often not likely to be familiar ones. The writers of the questions have generally done a good job of simplifying the items for the average reader and should be commended in their effort. The major difficulty with the proposed census form lies in its visual complexity and not in the language used for the questions themselves.

Additional concern that I would like to voice is in regard to the lack of effective items that help us measure levels of literacy in the populations. The identification of years spent in school is indirect at best and inaccurate at worst as a measure of literacy levels. More sophisticated measures of literacy levels are essential and the census must incorporate measures that can better save as springboards for further study of the issue. Similarly, the questionnaire does not go into great depth regarding the self-reported ability of respondents to

read and write English, Spanish or other languages. Certainly, I regcnize that the final census form represents a distillation of many concerns and interest in our society and that no single survey can achieve all of our shared goals. The present form reflects these compteing objectives and priorties and as such its complexity is overwhelming to the marginal reader. It would seem appropriate to design a survey progess that brings the large numbers of poor readers genuinely into the process, describes their circumstances adequately, and allows policymakers to address the magnitude of the problem accurately so that workable solutions can be found.

I thank you for the opportunity to testify before you today and I will be happy to respond to your questions and concerns on this very important topic.

INTERNATIONAL READING ASSOCIATION

QUESTIONS SUBMITTED BY SENATOR PRYOR

Your first question addresses an important issue, will there likely be anyone in the household capable of reading and completing the alternative questionnaire? I believe that in most households the answer would be yes, usually someone would be available and capable of reading the materials. I am, however, very concerned that in "high risk" households, defined as non-English speaking, minority, or low socio-economic status, there is a much higher likelihood that a capable person will not be present. This would seem to exacerbate the problems associated with collecting valid data on the very populations so often addressed by government and public programs at all levels. The visual and conceptually complex nature of the forms is a further hindrance, especially for the marginal reader who may be able to mechanically read the words but cannot adequately understand the task.

Your second question deals with the problem of who would fill out the census form in a non-English language household. It is my opinion that translated questionnaires are essential in this circumstance and there is a high probability that no capable respondant will be found in a large proportion of such households. The same factors I cited in the previous paragraph would apply to the non-English proficient setting.

The third question is a most important one from the perspective of the International Reading Association. Does the census help us determine the literacy rate in this country? I believe the answer to this question is no, not adequately. The educational attainment data collected by the census is not sufficient to infer literacy attainment and must be supplemented by some form of performance measure, perhaps derived from the National Assessment of Educational Progress (NAEP) reading tests for young adults. Why not explore the possiblity of including a very small number of reading test items on a sampling of questionnaires to be used as a tool for estimating literacy? At the least, consideration should be given to including a self-report of simple literacy. That is, can you read well enough to progress in your job, to read a newspaper, to fill in government forms, to follow directions on a medicine bottle and the like? Such data could be used for more substantial follow-up or confirming field studies. Results would be very helpful for policy makers as decisions on how to address illiteracy are made.

My response to your fourth question is yes, a census form with fewer questions would be considerably easier for marginal readers to complete since the form could be made less complex. The marginal reader will be intimidated by the present alternative questionnaire and, therefore, unlikely to attempt it. Worse, the respondant may fill it out randomly, with false data or guesses, rendering the results useless.

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D.C. 20410-1000

OFFICE OF THE ASSISTANT SECRETARY FOR
SLATION AND CONGRESSIONAL RELATIONS

May 12, 1987

Honorable David Pryor
Chairman, Subcommittee on Federal
Services, Post Office, and Civil Service
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510-6250

Dear Senator Pryor:

Thank you for your letter of April 23, 1987 to Secretary Pierce, inviting the Department to testify about the 1990 census at the joint hearing of the Senate Subcommittee on Federal Services, Post Office, and Civil Service and the House Subcommittee on Census and Population on May 14.

As we have discussed extensively with your staff, HUD has worked with Census Bureau officials for many months concerning the content of the short and long forms, the value of information to be obtained from these forms, and the amount of required geographic detail. We are satisfied that the testimony to be presented by the Census Bureau meets all our needs with respect to these forms and are confident that any relevant questions on these forms can be handled well by representatives of the Census Bureau.

In this context, we feel that HUD testimony would be duplicative and therefore defer to the Census Bureau for discussion of these issues.

Very sincerely yours,

Stephen May
Assistant Secretary

STATEMENT OF
THE HOUSING STATISTICS USERS GROUP
BEFORE THE JOINT HEARING OF

THE FEDERAL SERVICES, POST OFFICE AND CIVIL SERVICE SUBCOMMITTEE (SENATE GOVERNMENTAL AFFAIRS COMMITTEE) and THE CENSUS AND POPULATION SUBCOMMITTEE (HOUSE POST OFFICE AND CIVIL SERVICE COMMITTEE)

May 14, 1987

The Housing Statistics Users Group (HSUG), an organization of major private and public users of federal housing statistics, is pleased to have this opportunity to submit a statement before this Joint Hearing. We respectfully request that this statement be included in the hearing record.

HSUG questions a number of changes that are being made in the scope and coverage of the 1990 Decennial Census. As outlined below, we have identified changes in practice that will make it difficult to monitor current programs directed at the poor, compromise the data bases that are needed to frame new legislation, make it difficult to evaluate the effect of the 1986 Tax Reform Act on household behavior, and disrupt a continuous series of data on changes in the quality of the nation's housing stock which has been available since 1940.

The remainder of this statement focuses on five separate issues related to the 1990 Decennial Census.

Survey of Residential Finance - The 1988 Budget and the 1989-1990 planning ceiling for the Census Bureau does not include funding for the residential finance survey (RFS). The RFS obtains information on the source of down payment, purchase price and year acquired, as well as characteristics of the mortgage(s) and the property. The RFC, which has been conducted since 1950, is the only source of information on mortgage prepayment penalties, the age (or maturity) profile of debt on single-family homes, and the financing of rental housing.

In addition, the Tax Reform act of 1986 has substantially lowered the after tax return on rental housing. The long term impact of this change on housing cannot be confidently predicted and the RFC represents one of the few sources of relevant information on the impact of these changes on the availabilty of rental housing.

Also, as a result of tax reform, individuals are now facing substantial shifts in the relative after-tax cost of housing-related debt and other consumer debt. The cost of credit

that is not housing-related will rise as the relevant tax deduction is phased out. It is probable that this will cause consumers to shift toward mortgage debt, raising a number of public policy concerns.

Information that is only available in the RFS includes data on mortgages held by individuals and on the ownership of rental housing. The information on rental housing is especially important in aiding the formulation of public policies directed at providing affordable housing to low and moderate income households.

Components of Inventory Change - Since the 1960 census, this supplementary survey (CINCH) has tracked individual units over time, identifying units added by new construction, structures moved between sites, the subdivision of existing units, the conversion of residential structures to and from nonresidential uses, and the impact of demolitions and disasters. For the poor, the supply of shelter comes largely from sources other than new construction. CINCH is the only available source of information on the amount of housing generated by other means than new construction.

By focusing on changes in the housing stock, CINCH can help evaluate the effects of changes in tax laws on the volume, quality, and structure of the housing stock. For example, the Tax Reform Act of 1986 shifts tax incentives toward owner-occupied units and away from rental units and CINCH will be valuable in tracing the impact of these changes.

Information on "complete plumbing facilities" and "number of bathrooms" - Research has shown that information on the availability and type of plumbing are key measures of the quality of housing. The Census has indicated on the intention to change the collection of data on the presence of "complete plumbing facilities" from full coverage, i.e. 100 % "block" basis, to a sampled basis. In addition, information on "number of bathrooms" has been eliminated from the 1990 census content submission to Congress. With the elimination of other items that focus on housing quality, the "plumbing" question becomes the last remaining item that enumerates housing condition. The Census has included questions on plumbing since 1940 and, therefore, this information permits trend analysis of the quality of housing.

Its other use is in targeting local housing programs, including housing rehabilitation. The use of sample data rather than 100 % coverage seriously degrades the use of this information when monitoring housing rehabilitation programs where special housing needs exist. Urban areas are a problem but so, also, are smaller census blocks in rural areas where the sample size is only one-in-six. The HSUG believes that "plumbing facilities" question should be returned to the 100 percent level, and that as a minimum, the minimum sample size for all items that bear on housing quality be increased from one-in-six to one-in-two for all local areas.

Similarly, the questions on "number of bathrooms" should be reinstated. Research has indicated that the number of bathrooms is the best single measure of housing quality. Thus, information on the number of bathrooms makes it possible to distinguish areas where housing of a standard quality is unaffordable from areas where the average house price is high because of higher average quality.

The Presence of Air-Conditioning - The question on air-conditioning has also been eliminated from the 1990 census content submission. The recent decline in energy prices has temporarily reduced public concern with energy conservation. Air-conditioning use, however, in many areas of the country "tops off" the peaks in energy use and therefore set the required capacity levels for public and private electric generating facilities. Longer range investment plans, which determine generating costs in the future, depend upon information on energy-using devices. In addition, the incidence of air-conditioning is an important measure of housing quality.

Disclosure Avoidance Techniques - The Census Bureau, in attempting to protect individual members of the public, will be adopting procedures in the 1990 Census to suppress "true" counts when the publication of such information would permit inferences to be drawn with respect to the housing of individuals. For example, if there were only five black families in a census block, the details on housing characteristics for that group would be suppressed by placing "synthetic" numbers in the appropriate cells. One rule in assigning numbers would be to substitute numbers taht are rounded to the nearest integer that can be divided by three. In the case of the five families mentioned above, the cell would not contain five but, rather, would contain a value of either three or six selected through randomizing procedures.

Although the policy of non-disclosure is laudable, this approach causes substantial problems when attempting to measure "low incidence" or "rare events" which are actually quite common when dealing with measures of poverty. The lack of plumbing, excessive crowding, minority housing, housing of the indigent aged as well as small children living in poverty are all necessary data for current federal, state and local programs and proposed legislation. When synthetic numbers are substituted for actual counts, the statistical record is compromised and, therefore, alternative methods of limiting public disclosure should be examined. Controlled rounding, rather than this approach may represent a valid alternative.

Referring back to the earlier discussion, the use of synthetic numbers is particularly inappropriate in rural areas where block density is low. It is precisely in these areas where substantial pockets of poverty could be "randomized" away because of the worthwhile goal of protecting the public from data disclosure.

Conclusion - The Housing Statistics Users Group welcomes this opportunity to affirm the value of the Census of Housing as a major resource in drafting legislation, monitoring the intended and unintended affects of past legislation and generally assuring that major expenditure programs are efficiently administered and precisely targeted. Although the balance between public and private resources continually change over time, the Census of Housing represents an integral part of the process and a measuring rod for the nations progress in providing adequate, affordable shelter.

National Governors' Association

Bill Clinton
Governor of Arkansas
Chairman

Raymond C. Scheppach
Executive Director

May 14, 1987

The Honorable David H. Pryor
Chairman
Subcommittee on Federal Services,
Post Office, and Civil Service
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I appreciate the opportunity you have given NGA to testify on the subjects planned for the 1990 Census at your joint oversight hearing to be held on Thursday, May 14, 1987. I certainly share your concern over establishing the necessity of each item in light of the costs involved. We will be unable to testify, however, on that day.

Since Census information is vital to the functioning of our State governments, we have been tracking the planning activities of the Census Bureau, have participated in Census content-related studies, and when requested, have provided our comments to the Bureau. We commend the Bureau for its efforts to identify data needs for the next Census, and especially commend the Government Division for its constant efforts to work with the states on a regular basis. The Governors have always been very important in encouraging citizens to cooperate in a census of the population. Mr. Keane, Director of the Bureau of the Census, recently met with the Governors to offer his assistance in this regard for the 1990 Census.

NGA believes the subjects currently planned for the 1990 Census represent those key items that are most important for decision making at the state level. The administrative arrangements for conducting the Census, processing the data, and disseminating and publishing the data appear to be quite reasonable and the Bureau appears to be making progress in plans for releasing the data in formats most appropriate to meet a majority of user needs.

Again, we appreciate the opportunity to express our views on the 1990 Census.

Sincerely,

Bill Clinton

Governor Bill Clinton

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

USING CENSUS COUNTS AND CONTENT: THE IMPLICATIONS FOR ACCURACY

A report Prepared at the Request of
the
Senate Committee on Governmental Affairs
and the
House Committee on Post Office and Civil Service

Daniel Melnick
Specialist in Federal Statistical Policy
Government Division
May 12, 1987

USING CENSUS COUNTS AND CONTENT: THE IMPLICATIONS FOR ACCURACY

This report analyses the Census Bureau's proposals for the subjects to be included in the 1990 census in light of the relationship between the information collected on the census and the utility and accuracy of the census. It was prepared as a background document for the Congressional review of those subjects pursuant to 13 USC 141.

LIMITATIONS

The purpose of this report is to analyze and provide several examples of the consequences of decisions about the inclusion or exclusion of subjects in the census. It is not intended as a comprehensive review of the Census Bureau's proposals nor does it make recommendations about the appropriate actions to be taken.

THE CONTEXT

Decisions about the degree of accuracy required, the subjects to be included and the detail reported depend on the way census results are used. For some purposes, minor differences will have little or no impact; for others, minute variations could have large repercussions. Consequently, decisions about the specifications for the census and the efforts justified to implement them reflect users' goals. Because the census is widely used and different

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interests demand alternative formulations, the specifications for it are not only technical but also involve important policy considerations.

UNIQUE CHARACTERISTICS OF THE CENSUS

While other statistical procedures might be used to collect information about the Nation, the census is the source for detailed analyses. Two kinds of detail are available exclusively from the census.

-- **Geographic detail:** Nation-wide sample surveys provide National or at the most state by state results. In contrast, the census results characterize the people living in very small areas such as city blocks, small towns or sparsely populated rural areas. The census also provides this kind of detail regarding the housing people live in and the vacant housing available for occupancy.

-- **Rare group detail:** Sample surveys provide information about groups within the population; however, they generally do not have enough data to describe the condition of rare groups. For example, most surveys conducted by the government could not be used to describe the status of women living alone who are over age 75. If, for example, program planners need to know about the proportion of these women who are living below the poverty line, they have two choices: conduct a special study of them or obtain information from the decennial census. Because fielding a special study is often time consuming, it involves delays in the implementation of a program.

Consequently, the decennial census results in a stock of detailed statistical data that the Congress, Executive, States and Cities can use to fashion programs and implement solutions. When considering the content of the next census, it is important to recognize that decisions about the questions asked will facilitate or limit the kinds of practical steps government can take to address the Nation's problems.

Likewise, the subjects included have an important influence on the picture of American society that is available. We might say that the content of the census is analogous to the choice of emulsions used for color film: these set the limits for the shades of color which can be seen in the resulting pictures;

similarly. the content of the census limits the topics for which analysts can provide detailed information about the Nation.

THE BUREAU'S PROPOSAL

Following procedures used since 1950, the Bureau proposes to again ask four types of questions.

A. 100 percent population questions are asked about each person included in every household in the Nation as well as persons not living in households. Six subjects are proposed in this category. All of these were included in the 1980 census.

1. Name: The name of each person will be included on the form but generally not captured in the computerized record. The main purpose of this item is to help keep track of who is being included in the household. It also makes it possible to check the count during followup activities and the evaluation.

2. Household relationship: Respondents are asked to provide the relationship between the first person listed (generally themselves) and the other people living in the household. This information is used to keep track of the people being counted and is also the basis for analyses that show the condition of families. Because the census form includes all of the people living in a household--even if they are not related--this item is the only way of providing information about families.

3. Sex: This item is also considered to be an important part of the identity of persons. It is the basis of most census analyses. It has been shown to be an important factor in the evaluating the completeness of the count.

4. Race: The Bureau largely relies upon respondents to identify their own race (including white, black, American Indian and several Asian nationalities) and those of the persons living in the household. Enumerators are instructed to accept the information as provided by respondents. This item is used in the enforcement of the civil rights laws. For example, the number of persons in the labor force who are members of different race groups is an important factor in establishing goals for affirmative action. When the States draw district lines for Congressional and State Legislative seats, they must take race into account to be sure that they do not violate

provisions of the Voting Rights Act. Information about the economic and social progress of persons who are members of different racial groups is closely watched by various interests. This information is also used in evaluating the census. Differences in the completeness of the count among blacks and whites are reported to persist in spite of the many efforts to eliminate them.

5. **Age:** Age is also one of the factors used in determining the completeness of the count. It is vital for tracing the differences between young and old people and is used for example in projections of the resources required for the social security system.

6. **Marital Status:** The respondent is asked if the person is married, separated, divorced, widowed or never married. In 1980, the census only recognized marriages that occurred after age 15. During the editing of the returns anyone under age 15 who indicated a marital status other than "never married" was changed to "never married." The Bureau considers this question to be a "basic demographic indicator." In combination with the question on relationship this item is used to more fully describe living arrangements. It allows the Bureau to track changing life styles.

7. **Hispanic origin:** The Spanish Census Act (PL 94-311) provided a congressional mandate for the collection of this information. It is used for affirmative action and civil rights enforcement.

B. 100 percent housing questions are asked about each housing unit and household in the Nation. Eight subjects are proposed in this category. Two of them are new [the rest were included in the 1980 census].

1. Number of units in structure: Respondents are asked to report the number of housing units in the building. This subject provides information about the density of housing. It is used by local governments in determining and monitoring zoning regulations. It is also important in assessing the need for mass transit and roads.

2. Number of rooms in the unit: In combination with the number of persons person in the housing unit, this subject provides information about overcrowding which is defined as a housing unit with more than one person per room. The extent of crowding is a measure of the need for housing and is used in the allocation of funds for housing.

3. Tenure: Respondents are asked to indicate if they own or rent their residence and whether it is a part of a condominium. This information is used in the analysis of the housing market to separate the owners and renters. It is important in designing the sampling plan for the survey that results in the Consumer Price Index (CPI) because the cost of rent is a major part of the CPI. According to the Bureau of Labor Statistics, indexing provisions built into various provisions of federal law mean that a change of 1 percent in the CPI results in a change in $4.6 billion impact on the Federal budget. These data are also used in setting housing costs for members of the armed forces.

4. Value of the home or monthly rent: Provides detailed data about the relationship of what people spend for rent or mortgage payments and their income and other characteristics. Used to set the amounts of money people receive as rent subsidies under HUD's fair market rent program.

5. **Vacancy Characteristics:** The followup enumerators of the Census Bureau will compile information about vacant housing. This information helps account for housing and is a part of efforts to count each person. The item is also used to identify places where there is a surplus and shortage of housing. HUD uses it to plan and implement federal programs that aid housing. For example, FHA considers the prevailing vacancy rate when it decides whether to participate in loans to builders.

6. **Plumbing:** Respondents are asked whether their housing unit has indoor plumbing. This is regarded as a measure of housing quality. Lack of indoor plumbing indicates sub-standard and unhealthy housing conditions. In 1980, about 2.5 percent the Nation's housing did not have plumbing. However, these units were not evenly distributed over the Nation but concentrated in certain localities. For example, in the last census found that in 11 percent of the counties in the US 10 percent or more of their housing lacked plumbing. This subject can be used to highlight neighborhoods were housing is a problem.

7. **Telephone:** Including this question saves money in the followup of the census because it makes it possible for the Bureau to use the phone to call people rather than send out an enumerator. While the Bureau will report on the number of housing units that have telephones, the telephone number will not be recorded in the Bureau's computers. In 1980, respondents were asked to provide a telephone number but the Bureau did not tabulate the number of households that have a telephone.

8. **Congregate housing:** Respondents will be asked to indicate if their rent includes meals. In the National Content Test less than 1 percent answered yes to this item. However, the Bureau will argue that without this subject, its rent statistics would be inflated.

C. **Sample population questions** are asked about every person living in households selected for the sample (about 20 percent of the households) as well as a sample of the persons who do not live in households. Ten subjects are proposed for inclusion in 1990.

1. **Education-enrollment and attainment:** The enrollment question provides detailed information on the number and characteristics of young persons who are attending and have dropped out of school. Attainment shows the number of years of schooling that each person has completed. This information is used by private companies in deciding where to locate plants and other employment centers as well as in their marketing strategy.

2. **Place of birth, citizenship, year of entry:** This information is used wherever policies require information about citizenship and the number of aliens. It is used in planning immigration policies. It is also used in studies of the pool of persons who are eligible to vote in elections.

3. **Ancestry:** This question was added in 1980 to provide information about groups not covered by the race and Spanish origin questions on the 100 percent form. It could be used by any group that wants to assert a need for special consideration under the equal opportunity laws.

4. **Language spoken at home:** This identifies the population that has a difficult time with the English language. It could be used to identify those persons who require foreign language assistance in voting or other matters as well as to analyze the need for special education programs that are aimed at people who do not speak English.

5. **Migration:** This is a basic indicator of population movement. Used as a basis for checking the Bureau's estimates of population between the census and to understand the reasons for movements and also to assist in predicting future growth. The information might also be used to construct samples of people who have moved in the last 5 years. For example, anyone wanting to estimate the number of farmers who have left family farming in the last five years might start with the responses to this question.

6. **Disability:** Respondents are asked to identify individuals who cannot work or travel because of disabilities. It is used to estimate the number of people who could benefit from special programs regarding rehabilitation services, vocational education and anti-discrimination activities. Veterans Administration uses it to determine where to locate medical facilities for veterans.

7. **Fertility:** Each women is asked to indicate the number of children she has borne. This item describes the child bearing characteristics of the population. It provides a profile of the levels of fertility of different groups in the greatest degree of detail and insight on population growth differentials among groups.

8. **Veteran status:** This item counts the number of persons who have served in the active armed forces or national guard. The Veterans Administration uses the data as a base line for the veteran population projections for planning purposes. For example, it is used to help plan where to put hospitals and other medical facilities as well as outreach and employment programs for veterans.

9. **Employment and unemployment:** This provides geographic detail for information that is regularly collected on the Current Population Survey. This information is used by BLS as a part of estimates of employment and unemployment for areas that are smaller than an entire labor market. Where other currently collected information is not available BLS uses the census data together with other information to provide the best possible estimates for some areas. For example, Cook County Illinois is dis-aggregated from Chicago using various sources including decennial census data. This subject also provides detail for very rare groups. The Department of Labor and the Department of Commerce use the resulting estimates to allocate funds under the job training partnership act.

10. **Occupation, industry and class of worker:** This information describes the work done by persons. It is used to evaluate the work force. For example, in analyses of affirmative action it is used to determine the supply of persons in different occupational groups. It is used to project the supply of persons in highly skilled occupations. State and local governments use it to determine the need for vocational education.

11. **Place of work, and commuting:** These are the bench mark data for local transportation planning. Data are used to identify the need for mass transit and roads and are used for determining the number of passengers likely to use those facilities. Respondents are asked where each person in the household live, work, and how they get there, and what time they leave for work. They are used to identify transportation problems that need to be solved. FEMA uses the information summarized at the work place to plan for the evacuation of the day-time population if this was ever necessary. This data is also used as a part of the identification of Metropolitan areas and labor market areas.

12. **Income in 1989 and work experience:** In this subject, the Bureau collects information on various sources of money income. This

subject is the basis for statements about the number of people living below the poverty line. Various programs (such as Title 1 of the Elementary and Secondary Education Act) require its use in funds allocation.

D. **Sample housing questions** are asked about the households and housing units that are included in the sample. Ten subjects are proposed for inclusion in 1990.

1. **Heating equipment and fuels:** This is used to calculate the amount of energy used by households and assess the need for and planning for energy assistance allocations. It is also used in anticipating the future requirements of the Nation for energy and tracking where these requirements are greatest.

2. **Source of water and method of sewage disposal:** This identifies areas that have housing that may be hazardous to the safety of the occupants, where new housing could not be built until you put in a water system.

3. **Autos, light trucks and vans:** This is used in transportation policy planning. DOT uses it to determine the likely amount of traffic generated by a household. This is a part of their calculation of the need for highways.

4. **Kitchen facilities:** If a kitchen is not included in the housing unit, that unit is less suitable for low income occupancy. This subject makes it possible to characterize areas with regard to the housing quality.

5. **Year structure built:** This is a quality question that is used in the Federal grant programs; it gets at the infra-structure (such as the water and sewer lines that may have been put in a long time ago).

6. **Year moved into residence:** This makes it possible to characterize neighborhoods with regard to their stability. Newly developed areas can be identified as well as older changing ones.

7. **Number of bedrooms:** The average rents charged for housing units in different areas are classified by the number of bedrooms. This is used to establish the fair market rent; low income families are provided with rent subsidies.

8. **Farm residence:** This identifies the farm households. This subject allows the Census Bureau to prepare extensive analyses of the characteristics of people who live on farms.

9. **Housing quality:** The Bureau is proposing a new subject for 1990. Housing quality would be measured by asking if there are holes in the floor and how many times the heating equipment broke down during the past year.

10. **Shelter costs including utilities:** This asks for total out-of-pocket expense for housing as opposed to just the mortgage payment or rent. This makes it possible to estimate the percent of income that is spent on housing. FHA and VA as well as mortgage lenders examine this data when they set standards for mortgage eligibility.

HISTORICAL BACKGROUND

The decennial serves many purposes. During its first 100 years, this tally grew into the Nation's principal statistical activity. 1/ By the end of the 19th century, the enumeration was the occasion for a vast stock-taking that included not only a count of the population and its characteristics, but also births and deaths, as well as a census of manufactures and agriculture. 2/ Early censuses collected facts about diverse topics. For example, they

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1/ Carroll D. Wright. The History and Growth of the United States Census. Prepared for the Senate Committee on the Census. Washington. Government Printing Office. 1900.

2/ History and Growth of the U.S. Census p. 12-76.

included inquiries on religious bodies, 3/ colleges, insanity, 4/ and the morality of each person's "conjugal condition."

Before the permanent Census Bureau was established in 1902, the enumerators compiled this information as a part of the tally. Since then, many of these topics gradually were relegated to separate activities. Others were dropped. Yet, the decennial census continues to serve many needs.

LEGISLATIVE APPORTIONMENT AND DISTRICTING 5/

The census plays a vital role in our political system because it is the basis for the apportionment of the House of Representatives. Its results also are used to allocate seats in State legislatures as well as local government councils and boards. In the case of the United States House of Representatives, this involves a two-step process. First, seats are

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3/ A separate census of religious bodies is still provided for by 13 USC 102. This census was conducted as a part of the decennial census from 1850 to 1900. Subsequently, it was conducted as a separate activity. However, this census was last conducted in 1946. It collected information from religious institutions regarding the amount of members they had, the value of their property and active participation in their services. Prior to the 1970 census, the Bureau considered proposals to include a question on religious affiliation on the census form. However, subsequent to hearings held by the Subcommittee on Census and Population in August 1968, it was decided not to include this item on the questionnaire. See Hyman Alterman. Counting People. The Census in History. Harcourt, Brace and World, Inc. New York. 1969. pp. 253-255.

4/ For a discussion of how the 1840 census questions on insanity were used to justify slavery, see Gerald McWorter. Racism and the Numbers Game: A Critique of the Census Enumeration of Black People and a Proposal for Action. in The Illinois Council for Black Studies. Black People and the 1980 Census, Proceedings of a Conference on the Population Undercount. University of Chicago November 30 -December 1, 1979. p 115-116.

5/ David Huckabee of the Government Division reviewed this section, and provided useful information and suggestions.

apportioned to the States. Subsequently, State legislatures use census counts as they determine the boundaries of each congressional district.

The courts have ruled that these must be virtually equal in population within each State, but, district populations will necessarily vary from State to State. 6/ They also have consistently held that districting has to be based on population as certified in the federally conducted decennial census and not based on other types of information such as the number of citizens or registered voters. 7/

Those who draw the boundaries need facts about the characteristics of the people living in the proposed districts. To meet the requirements of the Voting Rights Act, State legislatures and districting commissions need information about the likely racial composition of the people living in the new districts. Analysts working for political parties combine census results with other information to estimate the likely political inclinations of the voters. 8/

The Census Bureau is required by 13 USC 141 to give the States the counts for small geographic areas by April 1, 1991, but the amount of information

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6/ In 1983, the Supreme Court decided in Karcher v. Dagget 462 U.S. 725 (1983) that a population variation as small as 0.7% between districts was impermissible. Although districts must be equal in size within States, there is no such rule applied among States. After the 1980 census, for example, the average district contained 519,000 persons, but 112 districts were either smaller than 500,000 or greater than 531,000 persons. This came about because each state must have at least one district. The Constitution requires that districts first be apportioned to States and then delineated within them. Consequently, their boundaries cannot extend across State lines and 435 seats cannot be divided evenly among 50 States.

7/ This paragraph was based on information provided by Thomas Durbin of the CRS American Law Division.

8/ Billingsley, Keith R. Dunn, Delmer D. Reapportioning in the 1970s: The States and the Bureau of the Census. State Government, v. 47, Summer 1974: 180-184. See also Dunn, Delmer D. Billingsley, Keith R. Small-Area Data and the Reapportionment Process: a Critique. Review of Public Data Use, v. 2, Oct. 1974: 2-12.

provided along with them is subject to negotiation between the Bureau and the States. This is important regardless of changes in the number of Members apportioned to a State, because changes in boundaries might have an equally consequential impact.

To satisfy State laws providing deadlines for drawing the new boundaries, legislators need expeditious census reports. For most States, the Bureau's delivery of data by April 1, 1991--as required by 13 USC 141--is acceptable. However, this is not always the case. For example, in 1980, Montana law imposed deadlines that the Bureau could not meet. Consequently, the State did not redistrict in time for the 98th Congress. 9/

These deadlines are very important in designing the census. For example, the census experts might have a better idea of how accurate their figures are if they could wait for the revision of birth, death, immigration statistics relevant to April 1, 1990. However, these are not complete and available until after the required census reporting dates. Also, the Bureau might be able to avoid some errors if it did not have to process census results rapidly. The need to pass more than 110 million forms through its equipment in a few months forces them to purchase additional machinery and use more briefly trained processing crews. Increasing the scale of these operations to shorten the time to completion makes it more difficult to manage the census.

Procedures that would require more time are not deemed feasible. For example, some of the decisions about the kind and detail of information

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9/ Data necessary to redistrict were provided to Montana by February 1981, but not in time for the districting commission to complete its work in time. See Art. V, Sect 14. of the Montana Constitution. Under Montana law and procedures, the State would have needed the detailed information before December 1980, but the Census Bureau was not required to could not provide the apportionment figures prior to December 31, 1980.

collected respond to those problems. The Bureau's questionnaire designers emphasize forms that can be processed automatically. This reduces the opportunity for householders to provide an explanation when they think they do not fit into a category provided on the form. It also limits the number of alternatives that can be provided on the questionnaire and the amount of review and coding that can be accomplished.

Much of the debate about the statistical procedures that could be used to improve the census concerns the requirement to complete the field work by December 31, 1990. For example, several experts have voiced concern that careful reconciliation and processing would be difficult to accomplish before that date. They contend that the Bureau's plan does not allow adequate time for a complete review of the results of the evaluation before an adjustment. 10/

Both apportionment and districting require detailed and accurate population counts. The apportionment procedure can be very sensitive to minor changes in the population count. A shift of only a few persons in the count of a State's population could make the difference between the State being alloted an additional Member or losing one. 11/

10/ These concerns were articulated by members of the American Stat. Association Advisory Committee and the Population Association of America Advisory Committee to the Census Bureau during their joint meeting on October 9-10, 1986.

11/ On this point see Nathan Keyfitz [article in the American Statistician in 1979]. While it is very difficult to know the outcome of the apportionment in advance, speculation has already begun on the likely impact of small changes. For example, according to a 1990 apportionment projection prepared by the American Federation of State, County and Municipal Employees, California and New York may be competing for the last seat (435th) assigned. AFSCME's figures show that a population variation of less than .06 percent in New York's projected population could mean the difference between losing or retaining a seat. See: the Last Congressional Seat Is Up For Grabs. Campaigns and Elections. September/October 1986, p.47.

While districting decisions do not appear to be as sensitive to census errors, it has been argued that the high standard of equality set by the courts has increased the need for accuracy. 12/ If a court rejects a plan that has a 1 percent variation in House district sizes, and miscounting results in more than a 1 percent imbalance in the count in different parts of a State, some advocates contend, shouldn't the court disallow the redistricting based on data with this level of error? 13/ Others argue that this comparison is not correct because districts that do not have equal populations according to the reported census figures are clearly unequal but there is no clear way of establishing any particular district's miscount or its impact. 14/

POLICY-MAKING AND EVALUATION

Census reports provide information that policy-makers in Congress and the Administration can use when identifying problems, fashioning solutions, and evaluating the outcome. Similarly, the attentive public uses the material to

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12/ In Karcher v Dagget 462 U.S. 725 (1983), the State of New Jersey unsuccessfully argued that the population discrepancies among the State's districts should be considered to be essentially zero because census error normally was considered to be greater than the discrepancy.

13/ This work has not yet been fully reported. For a preliminary report of some of the findings see. J. Gregory Robinson. New estimates of Corrected Births and Fertility 1900-1935, and Birth Registration Completeness, 1920-1935 for the White Population of the United States. Paper presented at the annual meeting of the Southern Regional Demographic Group. Austin, Texas. October 16 to 18, 1985.

14/ For an analysis of a redistricting plan that did not achieve equality, see Schermerhorn, James M. Stoto, Michael A. Measuring a Redistricting Plan's Deviation from Population Equality and Its Effect on Minorities: New Mexico's Experiment with a "Votes Cast" Formula. U.C. Davis Law Review, v. 17, Winter 1984: 591-610. LRS84-17832

debate policies. Leaders look to the census for authentic information about current national conditions.

The census is a less-than-perfect vehicle for collecting information about a rapidly changing situation. The operations must be planned years in advance of census day. By law, the content and questions are fixed at least two years in advance. 15/ Some of the publications will not appear until September 1993 (3 and a half year after census day). In sum, some of the results may be delivered five years after the topics are selected. 16/

To overcome this lag, the Census Bureau and other research organizations conduct sample surveys and derive estimates from current administrative data (such as the records of the Internal Revenue Service or State employment agencies). In most of these ancillary activities, general census results provide key reference points while they also serve as a check on the accuracy of estimates.

For policy analysis, current data that are less precise frequently can be employed, because many users are more in need of rapid general answers than detailed ones delivered years later.

15/ 13 USC 141.

16/ Some of the reports for the 1980 census did not appear until September 1985. In 1990, the Census Bureau plans to deliver the results in a more timely fashion completing the publications by September 1993. According to the Bureau's plan, the tabulations required for apportionment and redistricting are given top priority in processing. The reapportionment counts will be delivered by the end of 1990 and the redistricting figures will be prepared within a year of census day. This timetable is fixed by 13 USC 141.

IDENTIFYING PROBLEMS

While problems and opportunities might be apparent from our common experiences, census data provide estimates of the importance of the issue by specifying the number of families or persons who are affected and its severity. Census results make it possible to trace changes in the Nation.

While census figures might have been applied most recently to social welfare issues, such as the extent of poverty and the equality of educational attainment, they also have been used extensively for other kinds of policy debates. For example, census results played an important role in establishing the national origins quotas used in the immigration and naturalization laws up to 1965. 17/ They also played an important role in establishing policies relating to the draft.

Fashioning Solutions

Once problems have been identified, census results participants fashion solutions. They figure prominent in estimates of the number of people who might be eligible to receive the benefits (or be subject to the penalties) of a targeted program. Similarly, census results can be employed to automatically trigger provisions of the law.

An Example: Estimating Federal Expenditures

17/ For a discussion of this point, see U.S. Immigration Law and Policy: 1952-1979. A report prepared at the request of Senator Edward M. Kennedy Chairman, Committee on the Judiciary U.S. Senate. Prepared by CRS. 96th Congress first session. pp. 7 and 51ff.

Budget analysts use census results when they calculate some Federal expenditures. For example, the projections of the number of persons who will qualify for benefits under the Aid to Families with Dependent Children or the Women's and Infant Care programs are based on estimates of the number of families with low incomes and a specified family composition. The estimates of the number of such families start with a census result that is updated from demographic and survey information. This then becomes the basis for the estimate of the amount of funds that will be required for the program which in turn has an impact on the expenditures that need to be included in the budget.

Evaluating Results

Census results are used to evaluate progress on achieving societal goals. For example, a number of studies conducted recently trace the progress of minorities in achieving economic and social equality. 18/ These studies typically compare results from censuses conducted over several decades. After the 1980 census, the Russell Sage Foundation sponsored a series of studies that were based on census data.

18/ This work has not yet been fully reported. For a preliminary report of some of the findings, see J. Gregory Robinson. New Estimates of Corrected Births and Fertility 1900-1935, and Birth Registration Completeness, 1920-1935 for the White Population of the United States. Paper presented at the annual meeting of the Southern Regional Demographic Group. Austin, Texas. October 16 to 18, 1985.

TARGETING THE IMPACT OF MESSAGES OR EFFORTS

Government also uses census results to target activities or messages. In this procedure, information about the characteristics and number of persons living in an area are the basis for deciding where to concentrate efforts. Perhaps the most famous historical example is the use of the 1940 census results in the plans that led to the internment of persons of Japanese origin during the Second World War. 19/ While individual records were not used (that would have been a violation of the privacy of census results), aggregated information about the areas where these persons lived was used to help the Army plan the evacuation.

Similarly, regional planners frequently use census results as the basis for decisions about the need for roads, schools, police protection, and fire fighting forces. When used in this way, census results are often combined with other information to provide more up-to-date estimates.

CLASSIFYING LOCAL GOVERNMENTS

Most States classify cities and towns according to their size. These categories are used to establish the amount of independence as well as the salaries of local officials. For example, cities of a given size are allowed to have independent police forces and collect taxes. As a result, the authority of local governments depends on their being able to establish that their towns and cities have a specified population.

19/ David Burnham. The Rise of the Computer State. New York. Random House. 1983. 273 p.

PRIVATE BUSINESS USES 20/

Private businesses make extensive use of census results. 21/ In fact, if we were to consider not only the information directly reported from the census but also the estimates and surveys based on census results, the private sector probably uses more census-based information than the Federal Government. An industry of vendors has developed. These companies buy reports and tapes from the Census Bureau and process them for the use of other corporations. Typically they add value to the results by combining them with:

-- More current information;

-- More specific geographic designations. This involves making some estimates for areas not reported by the Census Bureau and presenting aggregations not included in Census Bureau reports; and

-- Business information [such as company sales records] to make them more useful for private enterprise.

Businesses use census results to plan their internal operations, define and locate most lucrative market areas, select sites for factories, facilities, and stores, meet the requirements of government regulations, and judge the effectiveness of subsidiaries. The following sections present some examples of these uses and discuss the kinds of accuracy each requires.

20/ This section of the report is largely drawn from material provided during discussions with employees of Bell Atlantic, Dunn and Bradstreet, Market Statistics, and Giant Food Corporation. These firms were included in our discussion because they all employ demographic analysis staffs who were willing to share their experiences to provide examples of private business uses of census data.

21/ See Philip Hauser, Government Data for Business Use.

Meeting Regulatory Requirements

Many firms may need to use census data to demonstrate that they meet the standards embodied in government regulations or law. For example, figures derived from the census are the basis for establishing the labor force data that are used to show a firm has met the requirements of the civil rights laws in its personnel practices. In locating facilities, firms may also use census data when presenting evidence of the impact of construction on a community.

These applications are particularly important for regulated industries. For example, according to the demographers working for Bell Atlantic, census results are used as the denominators in calculations that test if telephone service unfairly discriminates against low-income and rural customers. Local telephone companies show that they meet the needs of these customers by citing the proportion of households in small geographic areas that subscribe to their service. The census provides the only figures that can be used for the population counts required for these rates.

Census data are also used to plan the expansion of service in a way that makes it possible for Bell Atlantic (and other utility companies) to offer service and not build excess capacity that would otherwise lead to unwarranted price increases. In order to do this, the firms must know where service is needed and project the likely new places where people will live. Because this information is required for areas about the size of census blocks, complicated demographic and mathematical techniques are used to update census results and project them for small areas. Utility companies not only use the data to plan but also to substantiate their claims before their regulators who judge the appropriateness and accuracy of the census based projections and estimates.

Selecting Communities for Plants, and Offices

Private businesses also use census results to classify cities and towns. These classifications have important implications for the economy of a region. For example, firms may decide where to locate head or regional offices based on the size or other characteristics of a place. Information about the labor force may influence decisions about where to locate factories, offices or plants. For example, the educational level of potential workers can be a key factor.

Similarly, the designation of revised and new Metropolitan Statistical Areas (MSAs) after each census can have a substantial effect on the way private businesses view major markets. MSAs are reviewed after each census. These are the first step in the reorganization of market data. Taking the lead from the Office of Management and Budget, private sector analysts routinely revise their information based on Federal designation of metropolitan areas. Many large firms use these areas when reviewing the success of their operations and allocating resources among them. 22/ In real terms, changes in MSAs can lead to the movement of company offices and facilities which in turn affects local economic conditions.

Locating Retail Stores

Large retail chains frequently use census data along with information about competition and market conditions to decide the location of their stores and the kinds of products and services to offer in each one. For example,

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22/ Interview with Ed Spar, president of Market Statistics, and Joseph Duncan, Chief Economist, Dunn and Bradstreet. September 5, 1986.

market analysis at a grocery chain such as Giant Food helps their managers to assess the number and income characteristics of people living in an area who might be attracted by gourmet supermarkets, such as the one in McLean, Virginia. Analysts working for the company maintain a complete set of relevant census material updated by information from local jurisdictions. The census data are not only used to estimate the population served but also help to differentiate areas based on the social and economic characteristics of the population. This information can be used to identify "up-scale" areas where specialized and prepared foods would be most appealing compared to those where an ordinary market would be more appropriate. 23/

This information is also widely used by companies that send advertisements through the mail. In this technique, census-based estimates are used to find people who would be most receptive to the messages. This kind of analysis has also been used by credit card companies and banks to target areas where people who would be good credit risks live. [This sometimes results in people in those areas being informed that they have pre-approved lines of credit.]

For many of these business uses, timeliness may be a more important consideration that the last iota of precision. In rapidly changing situations, making any decision that is educated by information could be preferable to acting on perfect information that was perfectly late.

Some business users say they would find updated information (based on surveys or a mid-decade census 24/) more valuable than more precise results from the decennial census. On the other hand, current population estimates begin with

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23/ Telephone interview with Jim Diepnbrock, Market Analyst, Giant Food Inc. October 31, 1986.

24/ Even though 13 USC 141 provides for a mid-decade census, this activity has never been funded.

census results. Regardless of the updating that occurs, inaccuracies in the original numbers are carried forward into the decade. The issue would appear to revolve about finding the appropriate balance between spending resources on obtaining more precise census results and collecting up-dated information between censuses. Disagreements frequently relate to the right place to spend the last few census dollars.

Impact on TV and Radio Advertisements

Census results also have an important impact on the advertising revenue of local radio and television stations. Those placing advertisements base their decisions on the likely size and characteristics of the audience. Both the decision to advertise and its cost are dependent on the judgment of advertisers about this audience. In making that choice they rely on census data or information that is derived from census data. 25/ These same kinds of data are also used by firms that advertise in print media such as newspapers and magazines. The telephone companies use it to estimate the characteristics of users of the yellow pages and this is a part of advertisers' decisions about where to feature their adds.

25/ For example, Nielsen and Arbitron (the two largest companies that rate the size of television and radio audiences) use estimates of the size of the population that are derived from census data. These form the denominator or base of their estimates regarding the proportion of the population that views television programs and are thus vital to their estimates of the size of the audience. In addition, the census data for individual blocks form the sampling frame from which the TV household sample is derived, for the national TV ratings. They are also used in the weighting at the end. Use census data augmented by their own field canvas of housing units, pop estimates are used where they are available. See Bill Hawkes. Census Data Quality: A User's View. Proceedings of the First Census Research Conference 1985.

SCHOLARLY RESEARCH

Since the 19th century, census results have been widely used by scholars.

For example, working from the results of the 1890 census, Frederick Jackson Turner charted the closing of the "American Frontier" and described the impact that this was having on American society. 26/ Students of his work believe that his most important thesis was greatly influenced by analyses presented in an early census bulletin.

Demographers base many of their analyses on the detailed information that is only available from the census. For example, those interested in relatively rare groups of people--such as Hispanic families headed by single women who have more than three young children--find that the census is the only source of nationwide information available for their work.

These results also provide the base figures for many other types of analyses. For example, scientists searching for leads in establishing the causes of diseases such as cancer frequently need to compare the rate of illness among groups in the population. To do this, they need to know the size of the groups. If the groups being studied are rare, census data may be the only good source of information about the number of people who are in the group.

For example, Dr. Thomas Mason of the National Cancer Institute developed analyses of the incidence of cancer for each of the more than 3000 counties in the Nation. These statistics were designed to isolate factors that might

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26/ For a description of the influence census reports had on Turner, see Billington, Ray Allen. The Genesis of the Frontier Thesis; a Study in Historical Creativity. San Marino, Calif, Huntington Library, 1971. p. 108-117. Billington describes the influence of census maps, compendia and especially of Extra Census Bulletin number 2. Increase and Decrease of Population 1880 to 1890, which proclaimed the end of the frontier.

figure in the etiology of the disease. Doing this requires consistent information on the number of people in each county by age, sex and race during different decades. To match these populations with information compiled in cancer registers, researchers need information about more detailed geographic areas. These analyses have made it possible for the medical researchers to examine the kinds of cancer that afflict different groups of the population and calculate the risks for these groups. They hope that this work will shed light on the factors that place groups at greater risk. The denominator of each rate is either drawn from census results or from a demographic estimate that begins with census results. 27/

27/ For examples, see Mason, Thomas J., and others. Atlas of Cancer Mortality Among U.S. Nonwhites: 1950-1969.Washington, U.S. National Institutes of Health. For sale by the Supt. of Docs., U.S. Govt. Print. Off. 1976 142 p. (U.S. Dept. of Health, Education, and Welfare. DHEW publication no.(NIH) 76-1204) This document illustrates the geographic patterns of cancer mortality among the U.S. nonwhite population. See also National Cancer Institute (U.S.). Epidemiology Branch. U.S. Cancer Mortality by County, 1950-1969, by Thomas J. Mason, Frank W. McKay, Epidemiology Branch, National Cancer Institute, National Institutes of Health. Bethesda, MD., The Institute Washington, U.S. Govt. Print. Off, 1974. v, 729 p. (DHEW publication; no. (NIH) 74-615) see also National Cancer Institute (U.S.). Epidemiology Branch. Atlas of Cancer Mortality for U.S. Counties, 1950-1969, by Thomas J. Mason... et al. Epidemiology Branch, National Cancer Institute. Bethesda, MD.,U.S. Dept. of Health, Education, and Welfare, Public Health Service, National Institutes of Health, 1975. (DHEW publication; no. (NIH) 75-780). See also National Cancer Institute (U.S.). Epidemiology Branch. Atlas of Cancer Mortality among U.S. Nonwhites, 1950-1969, by Thomas J. Mason... et al.. Bethesda, MD., U.S. Dept. of Health, Education, and Welfare, Public Health Service, National Institutes of Health. Washington, U.S. Govt. Print. Off, 1976. (DHEW publication; no. (NIH) 76-1204). See also National Institutes of Health (U.S.) An Atlas of Mortality from Selected Diseases, by Thomas J. Mason... et. al.. Bethesda, MD., U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health Washington, D.C. For sale by the Supt. of Docs., U.S. G.P.O, 1981. (NIH publication; no. 81-2397) National Cancer Institute (U.S.). Environmental Epidemiology Branch. May 1981.

SAMPLE SURVEYS DESIGN AND ANALYSIS

Researchers also use census results in the design and analysis of sample surveys. These provide much of the current information that is the basis for decisions in Federal Government and the private sector. Statisticians have designed procedures for updating census information during the decade so that their results reflect current condition. However, the decennial census remains the foundation of those estimates. Examples include: market surveys, public opinion polls; the unemployment rate; the Consumer Price Index; the American Housing Survey; the Criminal Victimization Survey; as well as several epidemiological surveys. Considering current survey research practice, it would be very costly and difficult to construct a valid survey of the American public without accurate and detailed census data.

Census results come into the survey process at two points: they are the basis for 1.) constructing a valid sample, and 2.) compiling appropriate estimates from the returns. When the so-called area sampling technique is used, census figures are the basis for selecting the areas where interviewing is done. When other procedures are used, 28/ census results help verify the representativeness of the technique and establish its appropriate weighting scheme. During the analysis, census results form the basis for establishing the correct chance of selection which in turn is the mechanism for projecting results from a small sample to a larger population.

Research workers also use census findings as so called "control totals". In this procedure, survey results are calibrated so that they agree with

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28/ For example, the procedures used in the Current Population Survey.

updated census figures. Another version of this procedure involves repairing survey findings to make up for incomplete response.

In the past several years, survey researchers have noted a drop in response and this has forced them to rely more heavily on census figures when trying to compile estimates. The growing importance of survey-based information and the increasing cost and difficulty of compiling it has heightened the impact of the census and in turn, tends to magnify the impact of any census errors. To the extent that the census does not accurately reflect conditions in the Nation, survey data will also be flawed. Currently, a large and growing proportion of economic, social, and governmental decisions are either based on this information or keyed to it.

IMPORTANCE OF CHARACTERISTICS AS WELL AS THE COUNT

Both for public and private sector users, the characteristics of the population may be as important (and in many cases more important than) the exact count. For example, those drawing district lines may want to consult information about the people living in the likely new districts. Those planning a targeted Federal Government program use the characteristics information to identify the places where the program could be implemented.

Similarly, in the private sector, information about the education of the labor force may be more important to plant location decisions than information about the number of workers living in the area. For example, officials of Bell Atlantic told us they locate operator assistance centers in areas with large numbers of women with young children and husbands who have blue collar jobs. These women must have completed high school but not sought education beyond high school because these kinds of women are more likely to be better

operators. This type of information is available for small geographic areas only from the census. Similarly, advertisers may need to know more about the capacity of customers to buy as well as their number.

THE IMPACT AND ACCURACY

Because the census is the basis for many statistical measurements created by Government and the private sector, modifications in its procedure can have a dramatic effect on the reliability, timeliness, accuracy and value of the information that policy makers, businessmen, political leaders, and citizens need. The attention recently directed towards increasing accuracy might be best viewed as an affirmation of the growing importance of the results.

This paper focuses on the relationship between the subjects included on the census, the potential uses of the data, and the consequent need for accuracy. Other related issues include the cost of the census, the efficiency of its operations, and the timeliness of its products.

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